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VOLUME 1. MONTHLY MAGAZINE.

SEPTEMBER, 1878.

OF ALL the pleasant months of the year, September, in most parts of the country, is the most truly enjoyable. The fierceness of summer is over, yet no chilling winds remind us of coming cold and storms. The air has a delicious mellowness in keeping with the ripening fruits, a sweet fragrance that speaks of autumn flowers, while the azure haze that half veils the distant hills, like a bridal veil, subdues, but does not conceal, the gorgeous beauty of foliage, fruits and flowers. September, however, has its duties as well as its pleasures, and though we never could believe with BRYANT, that there was anything sad or melancholy in our glorious autumn days, yet it is well to remember that another season of buds and blossoms will soon be numbered among the past. A few weeks more, and the early frosts will despoil us of our choicest floral treasures—the ripening leaves soon put on their gala dress of gold and crimson, and bid us a long good-bye.

In a climate such as that of New York, no season is so favorable for making a lawn as September. If the seed is sown before the usual equinoctial rains, and the weather of autumn is at all favorable, before frost the grass will have made considerable growth, and by covering with a light dressing of manure, for winter protection, will make in early spring almost a perfect lawn. This is the cheapest and quickest way to secure a lawn. The next best way is to sow grass seed as early as pos-

sible in the spring, and then, if the weather is favorable, a fair lawn may be expected by the first of July, though, of course, it will be thin. A thick, velvety lawn is the work of time.

There is no season so favorable as autumn for making general improvements in the garden. American autumn weather is superb. Our springs are short, and yet quite long enough, for our spring weather is miserable; cold winds and rains, and snow, and mud, and sleet. All important changes in the garden should, therefore, be made in the pleasant, dry weather of autumn. Dig up and put in order every vacant bed, as it will not only facilitate spring work, but do the soil good and have a neater appearance than if left rough and weedy.

Early autumn is the best possible time for re-arranging beds of herbaceous plants, such as Hollyhocks, Delphiniums, Pæonies, etc. Roots can be divided without injury, and generally with great benefit to the health of the plants. Lilies and hardy bulbs can also be removed and replanted as soon as the leaves begin to ripen. All beds of hardy bulbs, such as Hyacinths, Tulips, etc., should be made as early as the bulbs can be procured, which is generally about the latter part of September. Plants that are somewhat tender at the North, such as Tritomas, Pampas Grass, etc., and any other tender plants that it may be desirable to save over the winter, may be secured in pits, the construction of which we will speak of in our next number.

GARDEN BEAUTY.

Few men have said so many good things about fruits and flowers, and said them so beautifully, as the HON. MARSHALL P. WILDER. A very kind letter from this venerable Horticulturist, containing very flattering words about our MAGAZINE, calls to mind some choice passages of its author that we have long treasured, and which we now purpose to share with our readers.

"The cultivation of the garden, the ornamental planting of our grounds, and the general use of flowers, afford striking proof of the high state of civilization which marks the progress of the present age. Within our own recollection the use of flowers at funerals was deemed improper, nor was their appearance in the sanctuary greeted with pleasure. They were thought to be inconsistent with the proprieties of divine worship, diverting the mind, and detracting from the solemnities of the occasion. God was not seen in the flowers, in the Rose, or the Lily of the Valley. From the lovely forms and various hues of flowers, the glories and joys of the garden, the Royal Psalmist has derived some of the highest types of inspiration, the artist some of his finest conceptions of grace and beauty. We cannot, therefore, too highly or gratefully appreciate that divine wisdom and benevolence which has surrounded us with these manifestations of His perfection and glory, these beautiful creations,—

"Mingled and made by love, to one great end."

How delightful is the pleasure of communing with those lovely objects nourished and cherished by your own care, and which you almost imagine to be susceptible to your sympathy and love! "The garden," said Lord Bacon, "is the purest of human pleasures; it is the greatest refreshment to the spirit of man, without which buildings and palaces are but gross handiworks; and a man shall ever see, that, when ages grow to civility and elegance, men come to *build* stately, sooner than to *garden* finely; as if gardening were the greater perfection." "Nothing," said the immortal Webster, "is too polished to see its beauty, nothing too refined to be capable of its enjoyment." So thought the king of Israel when he made for himself gardens and orchards. So thought the noble Scipio when he retired to his favorite retreat, after he had made Rome mistress of the world. So thought our own Pickering, Lowell, Dearborn, and thousands of others in our own time, who have retired from the busy haunts of the city to the quiet scenes of rural life, that they might enjoy the rich gifts of bounteous nature,

and drink from those pure fountains of contentment and peace. And may I not add what experience has taught me of the sacred influences of rural life to soothe and comfort in those hours of depression, sickness and sorrow, from which none are exempt. Here, then, amidst fruits and flowers, and scenes of rural bliss, let my remaining days be passed, and at last, like fruit fully ripe, dropping softly on the bosom of mother earth, let me lie down to rest in the joyous hope of a glorious immortality in the garden of the Lord, where the tree of life beareth fruit every month, where blight, disease, and the wintry blast of death shall never come, where the summer of glory and perfection shall forever reign.

Some of the touching and beautiful, some of the most sacred and sublime inspirations of Scripture have been drawn from scenes in the garden. Nor has the imagination of the poet, philosopher, or psalmist, ever conceived of a spot more chastening, more refining or more hallowed in its influence.

"Though in heaven the trees
Of life ambrosial fruitage bear, and vines
Yield nectar; though from off the boughs, each morn
We brush mellifluous dews; yet God hath here
Varied his bounty so with new delights,
As may compare with heaven."

In no department of cultivation is improvement of taste to be more distinctly seen than in the decoration of our grounds, and the universal love of trees and plants. Many in this assembly can remember the time when there were but few green-houses in New England, and these were almost entirely confined to our retired and wealthy citizens. Now these plant-structures are to be seen in almost all our populous towns and villages, and so much has the taste and demand for plants and flowers increased, that many are devoted to special culture of the Rose, the Violet, or some other plant. Nor is this taste confined to the rich or middling class. Now almost every dwelling has its grape-vine or fruit-tree, its Woodbine, Scarlet-runner or Morning Glory. Even window-gardening has become a science, and few are so poor whose home may not be lit up with the cheering influence of a plant or flower, whose windows may not become more hallowed by the sweet influences of nature's bloom, than by the gaudy pageant-pane which perpetuates the name of a saint,—perhaps a sinner too. And I confess my heart has often been touched with tenderness and sympathy when I have seen the poor laborer, after a hard day's work, carrying under his arm a Rose or Geranium to cheer and solace the wife and weans at home. These are the outer manifestations of the soul for that fairer and better clime where flowers

shall never fade, the secret yearnings for that paradise beyond the skies which shall never be lost again.

I have spoken freely of the chastening influence of rural pursuits; but before I close allow me to allude again to flowers; to those symbols of all that is pure, lovely and beautiful,—those golden stars, that like the dew-drops of morning, sparkle on the bosom of mother earth. Flowers are the very embodiment of beauty; flowers are like angel spirits, ministering to the finest sensibilities of our nature, often inspiring us with thoughts, which, like the unexpressed prayer, lie too deep for utterance. God speaks by flowers and plants and trees, as well as by the lips of his prophets and priests. So felt Bacon, who desired always to have flowers before him when exploring the mysteries of that divine philosophy which has made his name immortal. Flowers have a language, and like the starry firmament above, proclaim His handiwork and glory. God has imprinted a language on every leaf that flutters in the breeze, on every flower that unfolds its virgin bosom to the sun, teaching us the great lesson of his wisdom, perfection and glory. How beautifully does the English bard express this sentiment,—

“Your voiceless lips, O flowers, are living preachers;
Each cup a pulpit, and each leaf a book.”

Who would not listen to their teachings! How intimately do they enter into our joys and affections! who would not live with them forever! With what tenderness and affection does Milton describe the sorrow of our mother Eve when bidding farewell to her flowers in Eden,—

“O flowers

That never will in other climate grow,
My early visitation, and my last
At even, which I bred up with tender hand
From the first opening bud, and gave ye names,
Who now shall rear ye to the sun, or rank
Your tribes, and water from the ambrosial fount?”

And here let me recognise the refining and chastening influence of *woman*, which so significantly characterizes the progress of civilization, and the finer arts of modern times. This is especially to be seen in her interest for the cultivation of fruits and flowers, and the adornment of “sweet, sweet home.” It is but a few years since woman was permitted to grace the festive board of agricultural and horticultural exhibitions. Now no occasion of this kind is deemed complete without her presence. Formerly the tables were surrounded only with the stalks of humanity; now they are adorned with the flowers of female loveliness, not “born to blush unseen.” Nor is this all; she is now among our most successful cultivators, training with tenderness and care plants as delicate as

her own person. Welcome women, then, we say, to these festal occasions, to the grounds we cultivate, to our gardens and green-houses, to all the beauties of nature and the pleasures of art, and to a paradise regained on earth.

Another strong evidence of the progress of refined taste and culture is seen in the establishment of our cemeteries, and the improvement of our burying-grounds. These once neglected and gloomy resting-places of the dead, casting terror and horror on the minds of children and youth, are fast giving way to the shady retreats and sylvan scenes of the wood and forest. Where formerly decaying grass, tangled weeds, and moss-covered tablets were generally to be seen, now may be witnessed beautiful sites, natural scenery and embellished lots, which awaken sensations that no language can describe, where the meandering path wends you to the spot in which rest the remains of the loved and lost of earth, where the rustling pine mournfully sighs in the passing breeze, the willow weeps in responsive grief, and where the verdurous evergreen, breathing in perennial life, is a fit emblem of those celestial fields, where the leaf shall never wither, the flower never fade, and fruition never end.”

COMMISSIONING SEEDS.

In the March number we pointed out some of the difficulties with which the seed grower has to contend, and the unreasonableness of planters who complain at the slightest deviation of any plant from the printed description, or from what they had good reason to suppose the seed would produce. There is, and must be, a certain degree of uncertainty in growing plants from seed. Hybridization takes place sometimes, in spite of the greatest care. In the vegetation of seeds there must also be some uncertainty. A certain amount of heat and moisture is necessary to the germination of seeds; if either is lacking they will lie dormant in the ground, or decay. A few weeks since we drilled in Sweet Corn for feed, and it came up very strangely; for five or six feet it was thick enough, but this was followed by a bare space, and so on through the field. But for the fact that it came up well in places we should certainly have thought the fault was with the seed. The ground was dry and the weather hot for two weeks, so that the corn got to be a foot or more in height; then came a few good showers, and in a day or two every bare spot was thickly studded with young corn, showing that the trouble was caused by lack of moisture. In some places the drill may have gone a little

deeper, or the soil contained more moisture, just sufficient to ensure growth. One of our neighbors sowed about an acre of Short Horn Carrot seed. When about half was sown rain stopped the work, and it was not renewed for a day or two. The half sown before the rain produced a crop seldom excelled, while the latter half had so few plants that it was plowed up and sown with Turnips.

Now, for the other side of this question, for while we desire planters to act reasonably and justly, we are quite willing they should hold seedsmen to a strict accountability. *Commissioning seeds* is the most ridiculous and the most unbusiness-like system ever suggested by the folly or avarice of man, and it is confined to this country alone. We never saw or heard of the like anywhere else, and we know in what light it is regarded by foreign seedsmen. The system is as follows: Boxes are filled with the seeds commonly used, and shipped to certain points on the Railroads, where they are taken in charge by agents, and delivered to the stores in the different villages and small cities all over the country. This is done in the winter, and in the summer an agent calls, examines the boxes and takes pay for what has been sold, deducting thirty or forty per cent., perhaps, which is the merchant's profit. The boxes are then returned to the seedsman to be replenished for a similar operation another year. Of course the merchant takes no risk, and he is willing to take boxes of half a dozen seedsmen. Having to stop at a little village for a delayed train, our attention was attracted by a grand array of seed boxes at the door of a store, and we counted those of five seedsmen. Remarking to the merchant that he must do a large business in seeds, we were informed that he only sold eight or ten dollars worth in a year. So, nearly all these seeds must be returned, at considerable expense. If the seeds were *good*, why should they be returned; if *bad* they were certainly not worth the cost of returning, unless they were to be sold again. If a part were good, and a part bad, why not inform the merchant, so that he could destroy the bad and sell the good another year.

Our readers will see in a minute that this system is filling the country with old seeds. If those five boxes to which we referred were worth ten dollars each, it will be seen there were forty dollars worth of old seed to be taken back for some purpose. We are aware that while some seeds are worthless after the first season, others retain their vitality for several years. We also know that there are some honorable men engaged in this business, while it would be very strange if there were not some

of a very different character. It is the system of which we complain, and we would as soon think of *commissioning* eggs or fresh meat as seeds.

PROF. BEAL, of the Agricultural College of Michigan, purchased these commission seeds at the stores, from the boxes of four different seedsmen, and publishes the results in a table which it would not be pleasant for us to publish. It was so bad that we are really in hopes the professor made some mistake. In conclusion Mr. BEAL says:—"Look at these figures; they are worth thinking about. These seeds are sold on commission. They are sent around the country in spring, and gathered up late in summer, we presume, to be sent around in a similar manner again till they are all sold. He who buys them in most cases throws away his money."

Before publishing such a record, with the names of those commission seedsmen, the Professor should have made very careful and repeated tests, which we presume was done. The whole system is bad, unbusiness-like and disgraceful.

The more people understand the philosophy of vegetation the less complaint will there be without cause, and the less cause for complaint, for the one produces the other. There are conscientious, careful seedsmen, who would make any sacrifice rather than send out dead or impure seeds. Among their customers are many careless, unreasonable people, ignorant of the laws of vegetable life, who cannot imagine why the Petunia seed did not grow, when the Sunflower came up nicely and grew six feet in height; so the soil was all right, and the very best possible chance was given. Such people are never to blame for anything; they always do things right. The consequence is a flood of scolding letters to the seedsman, annoying and discouraging,—almost causing him to say rash things about people's veracity (in haste,) as David did, and to conclude that there is no use in trying to be honest and careful, since the people will be unreasonable, and the careless, dishonest seedsman gets along just as well as he does.

The rogue, too, takes comfort from such a state of things. "The people don't know anything," he says. "They will find fault anyway. They don't know what to expect, or when the seeds or themselves are to blame; so, as I must bear a good share of the fault-finding, I might as well make something out of it." What we desire is that the people learn what they have a right to expect, in the words of the old saying:—"Ask for nothing that is not clearly right, and submit to nothing wrong."

HONEYSUCKLES.

Among all flowers, none are more common, none more classic in flower-lore, none more prized, by prince, poet or peasant, than the Honeysuckle. Its poetic name is the *Woodbine*, but so popular is the common name, Honeysuckle, that it is applied to very many different plants in all parts of the country. The botanical name, *Lonicera*, was given in honor of LONICER, a German botanist, who died about three hundred years ago.

The family of *Loniceras* (Honeysuckles,) embraces a large number of varieties, the best of which we show in our Colored Plate this month.

No. 1 is *L. Halliana*, a valuable variety introduced into this country from Japan by Dr. HALL. Even as far North as this it is almost an evergreen. The foliage is clean and handsome, and the flowers very fragrant. They are pure white when first open, but assume a creamy yellow tinge in a few days. This variety blooms almost continuously from June till frost. It is a rapid grower, and excellent for high trellisses. Specimens from twenty to thirty feet high are not unfrequently seen.

No. 2, *L. Belgien*, or Monthly Fragrant, producing a succession of flowers all summer. It is delightfully fragrant. The flowers are borne in clusters on the terminal shoots. The buds are a purplish red. The interior of the flower pure white, which soon changes to a cream and from that to an orange, giving the cluster a richly variegated appearance. With many this is the favorite of the whole family. It is a tall, strong grower, and very free flowering.

No. 3 is the charming *L. aurea reticulata*, (Golden veined.) This also is from Japan. We have seen specimens covering a trellis twenty feet high by three feet wide. It is hardy as far North as this, and the bright gold lacing of the foliage make it very desirable either as a climber, or when pegged down for an edging plant. The flowers are light yellow.

No. 4, *L. sempervirens*, (Scarlet Trumpet.) This is a native of this country; perfectly hardy, and the one most commonly seen. It is evergreen South, but deciduous North. The flowers are long, tubular, and in clusters. Bright scarlet without, and tinged with orange within. It is without fragrance, however. It is a rapid, strong grower, and in bloom from June to November. The contrast of the dark, glossy foliage and the bright clusters of flowers make it very desirable.

In addition to the above there are a number of varieties worthy of cultivation, among them the Yellow Trumpet, which is similar to No. 4,

except in the color of the flowers. *L. Periclymenum*, or English Woodbine, with fragrant, yellow flowers, blooming in June.

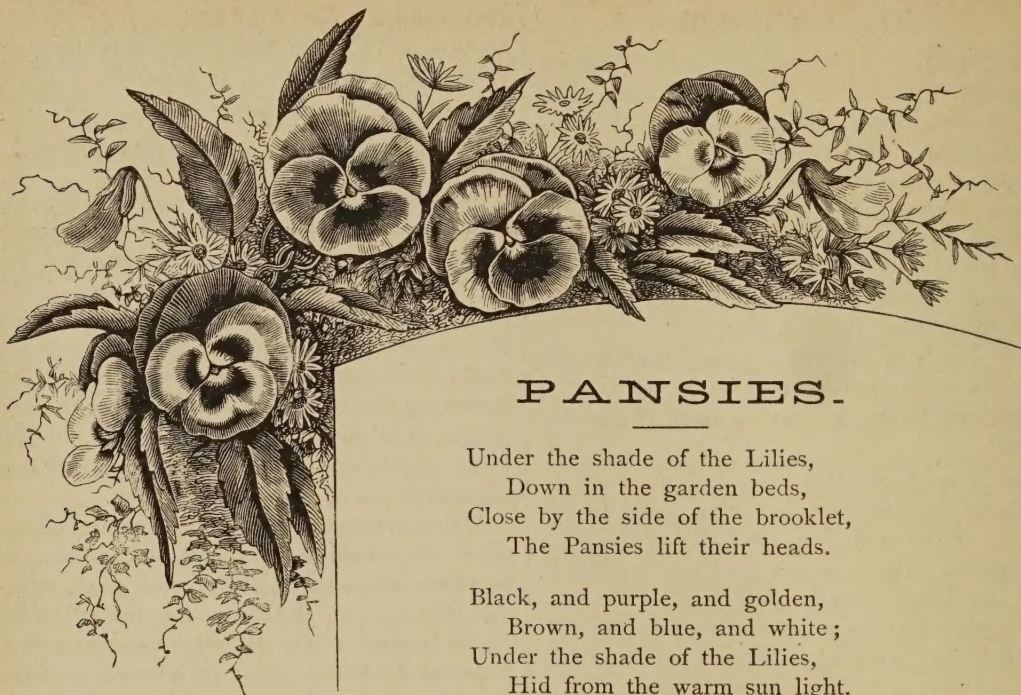
VEGETABLES AND FLOWERS.

While we have no kind of sympathy with the man who foolishly claims that a Potato plant is as handsome as a Rose-bush, or with old Dr. JOHNSON, who thought the handsomest flower he ever saw was a Cauliflower, we do think there is beauty, and a good deal of beauty, in a neatly kept vegetable garden and in a well grown vegetable, as well as in a thrifty orchard or garden of small fruits. The fact is, all Nature's works are beautiful when not marred by the foolishness or wickedness of men.

Few objects are really more pleasant to look upon than a field of Corn, and we have been in countries where no object created more attention than a clump of Corn among the tall plants on the borders of the shrubbery,—plants that had been nursed in their early stages with the greatest care in pots. A good bed of fine large Onions is no mean object, while for fragrance they hold their own against the world of flowers. The Potato is handsome in all its stages, and especially so when in bloom. The purple-leaved Beets are exceedingly fine, and we have seen them used in more than one country for ornamental purposes. The finer varieties of Parsley, and the curled Kales are as pretty as any of the Ferns, and may often be used with fine effect for ornamental purposes. Indeed, for garnishing they are invaluable. Among our ornamental pot plants there are very few that excel a good Pepper plant well loaded with its curiously formed scarlet fruit, and we can well remember when the Tomato was used for ornamental purposes alone.

A Cucumber bed in early spring every one likes to see. The leaves are so large and thrifty, and the flowers so yellow. It is like a glimpse of summer. The Lettuces, too, how refreshing and pleasant they look; and then to take hold of a rough, green leaf and find hidden in the earth a beautiful scarlet Radish.

There is beauty everywhere if we will only look for it, and while we would like to persuade every farmer to have a little flower garden for his own good, and for the pleasure of wife and children, we say if you cannot do this, by all means have a vegetable garden; grow everything well, keep all in perfect neatness, and health and happiness will be secured, and you will soon rise to the dignity of a flower garden. Beauty is persistent and progressive, and when it once gets a chance at a man it never loses its hold.



PANSIES.

Under the shade of the Lilies,
Down in the garden beds,
Close by the side of the brooklet,
The Pansies lift their heads.

Black, and purple, and golden,
Brown, and blue, and white;
Under the shade of the Lilies,
Hid from the warm sun light.

Tell me, beautiful Pansies,
Close beside the stream,
With your bright eyes looking upward,
Say, do you ever dream

Of the days when old King Winter
Will sweep o'er the garden beds,
And the trail of his icy garments
Will take off your bonny heads?

Nay, say the jolly Pansies,
Shaking their heads in a row;
What care we for the Winter,
With all his ice and snow.

Safe midst the roots of the Lilies,
We'll softly nestle and cling,
Till out of the sunny South-land
Comes the warm breath of Spring
L. A.

Open your eyes, my Pansies sweet
Open your eyes for me,
Driving away, with face so true,
The chilling wind and wintry hue,
That lingers so drearily.

Open your eyes, my Pansies sweet—
Open your eyes for me.
Where did you get that purple hue?
Did a cloudlet smile as you came through?
Did a little sunbeam bold
Kiss on your lips that tint of gold?
Tell me the mystery.

In your eyes a story I read—
A story of constancy.
After the storms and winter's wind,
Softly you came with influence kind;
Then as I bend with listening ear,
Your cheerful voice I plainly hear,
Preaching a sermon to me.

So whisper to me, my Pansies sweet—
Tell me in rustlings low,
Of that beautiful land where fadeless flowers
Brightly bloom in immortal bowers,
And no blighting wind doth blow.

Tell of the care that is over all—
That gives you your garments gay;
Whose loving hand clothes the floweret small,
That grows in the field, or by the garden wall,
Whose life is only a day.

Yes, tell of the love, my Pansies sweet—
Of the love that knows no end;
That through earth's winter safely keeps
Watch over his children, and never sleeps;
The love that paints the violet blue,
And quenches your thirst with drops of dew,
The weary heart's faithful friend.

MARIE.



LILIES.

CULTIVATION AND PROPAGATION.

To grow Lilies is a simple matter. Dig the bed two or three spades deep, remove stones and sticks, and dig in deeply plenty of old rotten manure. A sandy soil is the best. If the soil of your garden be clay, then add leaf-mould, bog muck, and as much sharp sand as you like. Don't be afraid of the sand; use plenty of it, and incorporate it well. If your ground is flat, all the better; and if it requires drainage, make sufficient so that surface water never remains. This must be attended to if success is expected, for the bulb once set must be allowed to remain. Beds are generally made from three to four feet wide, and about twelve to fifteen long. Full grown bulbs are set from four to eight inches deep, according to the size. I again tell you to plant them deep; the reason you will presently see.

Never crowd Lilies in a bed, but give them room, as they will soon get close enough together themselves, by lateral increase. A foot or twenty inches is generally near enough in a row, and two feet between the rows for the larger sorts; for the smaller sorts every amateur is to use his or her own judgment. Some use board siding for the beds, and it is much to be recommended in small gardens; a four or six inch board, one inch thick, is what we use, with which the beds are kept in their bounds with ease and precision. Between the beds, from sixteen to twenty inches is enough for the alley. After the tree has bloomed, if seed is not required, cut off the flowering head, but leave the stem with foliage on to perfect as far as possible the new forming bulbs and bulblets, and never cut it away till this is dead. As soon as the leaves are gone clean off the bed, rake in an inch or so well rotted cow manure, if possible, or any other, and trust them over winter below a blanket of snow to make you happy for next season, and for years.

The increase of Lilies is a great enjoyment to the amateur, as it is almost invariably a suc-

cess; and what a pleasure when the coveted blossom makes its appearance! This increase is done in six modes.

1st. *By Increase or Multiplication.* Before proceeding further, let us describe the growth of the Lily. The bulb, on being planted, starts at once to make roots, which spring from the base and fix themselves firmly in the adjoining soil. They are permanent, and die only with the parent bulb. A stem arises from the center or eye of the bulb, and on its top the growth of the flowers comes to perfection in summer. Nature always plants Lilies

deeply, sometimes as much as eighteen inches. Now, about the middle of this stem below the surface, a large quantity of roots are thrown off, and scatter all around, far and near. Among these roots a number of bulblets are formed, varying from two or three scattered at intervals to a thick bunch with forty or fifty of them, some as large as a hen's egg, others as small as a pea, which in time produce an exact blossom like the original. When the stem arises the parent bulb splits in two, and at each side of this, one bulb, and sometimes three extra, are formed. These send down new roots, and thus splitting year after year, till a very large clump is formed and an immense mass of bloom produced; but the roots on the stem all die with it, and form a



LILY ROOTS.

small bed of manure for the bulblets, if left. Of course they rob all the surface soil of its nutriment, as Lilies are voracious feeders. Thus you at once see the necessity of a gentle top-dressing each year, for the purpose of allow-

ing the ammonia, phosphates, etc., to be washed down to lay up a store for next year's new stem roots.

2nd. *By Creepers.* The North American Lilies, as far as I know, all increase by creepers and seed. If you pull up and examine the stem of the common *L. Canadense* after flowering, or that of the *Philadelphicum*, you will not find a single bulblet. These grow none. The roots are creepers, with very loosely attached thick, pea-shaped scales, which are formed by nature to lay up a supply of food. After the flower-stem arises, two or three shoots are sent off at various sides, furnished with plenty of scales. I am not aware that they serve any other use, as they are found on examination to be exhausted and dead after the first season. Our native Lilies are all



CREEPING ROOTS OF CANADENSE.

creepers, and, trebling or quadrupling each year, it is easy to see that, as at the sources of the Saskatchewan, they would soon cover acres of that rich black bottom land. One of these creeping heads will soon form a large clump, and I have already given directions for planting. But I find in my garden that true creepers are sent off by the *Umbellatum grandiflorum*, the Tiger Lily, the *Bulbiferum*, and their other varieties. Last November I followed one of these creepers for eighteen inches, which of course would bloom in due time.

3d. *By Bulblets.* We have already seen how these are produced. Now to propagate them in the first place healthily, they must have support. If the "mother" bulb is only an inch below the ground it is impossible for the stem to have space to throw out roots, or for bulblets to be formed; therefore plant about six inches deep, so that there may be room for the stem roots, which are a necessity. In the fall, when foliage is dead, scrape away the earth down to the main bulb, and carefully twist the stem out. It will do no hurt. Then fill up the hollow with old manure, for a support. Separate the bulblets, and plant in a prepared bed four inches deep. Let them remain for two years and they will all be large enough to bloom, when they should be transplanted again, into a permanent bed if required.

4th. *By Buds.* The Tiger Lily is eminently a bud bearer; also the *Bulbiferum*, and occasionally one may be found on any Lily stem. They grow in the axil of the leaf or the limbs, and are often numerous. I have a fine bulb now, which grew on a *Lancifolium* about a foot from the ground; they are also often observed in *Longiflorum Japonicum*. Treat them exactly as bulblets, and plant four inches deep; they will not smother, and will all be ready to bloom the third year.

5th. *By Scales.* When a grown bulb comes to hand you may remove a dozen or so of the scales, which have each in itself one or more germs near the base. Get a box a foot deep and fill it with good clean earth and sand; plant the scales about three inches deep in rows, and one inch apart; sink the box in any out of the way place in the garden, and water freely and often,—but I don't mean a deluge. In a short time small bulbs will be found forming at the base, sometimes two of them; these grow quickly. The second year transplant to a row in a small bed, and the third or fourth year you will have the desired bloom from its place in a permanent bed, for it will soon produce its noble tree. I use the word "tree" designedly. People speak of a cluster of Roses, a truss of Hyacinths, a bunch of *Narcissus Polyanthus*, a bloom of a Tulip, a spike of *Gladiolus*, a flower of a *Crocus*, a floweret of a *Forget-me-not*; but to a large growth of the Tiger Lily, or an *Umbellatum*, I think friend VICK, and all his customers, will chime in and say a "tree of Lilies" expresses the idea. If you don't like the term, don't bother, but send me a better one. As a rule, all scales and buds and bulblets are to be planted in rows in a well prepared bed, four inches deep and about two inches apart.

6th. The last method of increase is *by Seeds*. Get the seeds as soon as ripe, prepare a box as for the scales, and sow about one inch deep; there is no occasion to go deeper than an inch, or even less. Then sink the box and water freely, but never allow the plant to dry, as the bulblet is at this stage very tender. Some use only pure sand, but I never do. This is sufficient on propagation.

I think Lilies may be improved by trimming out the overplus blooms. I hear of enormous numbers of blooms coming on a tree, and although no one disputes the fact, yet the quantity deteriorates the quality. Every one who has carefully observed a large tree of *Auratum*, *Umbellatum*, Tiger Lilies, or *Lancifolium*, must have seen a few odd blossoms that never expand, but wither and die. The stem has not proper capacity to keep up a proper supply of

sap, and sap is the blood of a plant. The lower blooms come well, but the force of expansion dies with distance from the roots. Vegetable life, like animal life, when it has expended a certain amount of force, gradually weakens and dies; and I think this is the reason the top blooms so often wither. Therefore, on considering this point, I commenced on a tree of each of the above sorts, removing every second bloom, cutting it carefully, and I had a most marked improvement. I commenced as soon as the flowers were capable of removal; therefore the stem sent the same quantity of sap from the roots directly to half the number of flowers, which were thus doubly fed. I had three blooms on a young *Auratum*; I pruned two away, and the third was twenty-two inches across the back of the petals, and fourteen inches across the front of it. It was truly a monster. I can attest to the superiority of the blooms on the pruned trees over their natural neighbors, and I wish the plan might be tried by others and reported to MR. VICK or myself. The *Auratum* and Tiger Lily seem exceptionally benefited by pruning, and the *Lancifolium* and *Umbellatum* rather less; but a dead flower is better away than present, as would be the case if too numerous.

The advantage to the amateur in Lily culture is that you can have them coming in succession, from the middle of June till frost. First comes the *Pomponium*, and the last is the *Lancifolium*; and all Lilies are fine. Did you ever hear of anyone digging up a bed of Lilies to make room for something better for its own sake? Neither the sweet scented *Hyacinth*, the lustrous *Tulip*, the modest *Rose*, nor *Gladolus* can compare. I have many lovely *Roses* and scores of bedders, but the Lily is the flower for me. As to the speculation in Lilies now carried on in Holland, I am sure all amateur florists should frown it down. We had a *Tulip mania* two hundred years ago, and I see no reason for a *Lily-madness* now. By the careful culture in shadings of the varieties of flowers, the mercantile florist makes an honest living, and has all just reasons to get it from us amateurs; but we want some value for our money. I never knew of an amateur who was not only willing, but anxious for the chance to pay a good price for a good article of merit, but no one cares to be fooled.

It will be said by people who have but little ground, "But I would like something else than Lilies for a change, as I have only six beds, or so." You have ground enough, friend. I plant around the edge of the Lily bed, at eight inches from the side, a row of *Crocus*, and at such spaces as may produce a nice effect little

clumps of three or four *Tulips*, together, or in lines inside the *Crocuses*. Then I sow the whole bed over with some low bedding plant, and leave them alone. Thus I take four crops of flowers off the same bed every season. If the bulbs are varied, so much the better. You can also have in other beds *Hyacinths* or *Narcissus*, or *Parrot Tulips*, or *Scillas*, or a hundred other lovely things that good taste may suggest, planted to fancy. Thus you can have the whole garden gay all the season through, and be the envy of the careless. You will not, of course, put a bedder among the dwarf Lilies, as they are generally close enough. First we have the *Snowdrop* or *Crocus*, next the *Tulip* or its congeners, and then the bedder. The fringe of *Crocus* leaves looks splendid, and sets off the colored *Tulips*; and the bedder lasts all the season. In the meantime the Lilies are springing up in great glee on their own account. Don't be afraid that the others will hurt them; when the *Crocus* dies, and the *Tulip*, remove the leaves and let the bedder have a chance. Now the dead roots of these bulbs become food for the Lilies and enrich the soil, while the bedders serve as a carpet to cover the ground, and help to keep it moist and cool. *Tulips* require to be taken up at least every second year for thorough rest, or they will "run out," that is, become red and wild.

I can safely recommend the following low bedders: There is nothing that looks better than *Portulacas* in shades, crimson or yellow or white; the *Abronia umbellata* is a great favorite, and is very lovely; *Mignonette*; *Asperula azurea setosa*; *Whitlavia gloxinoides*; *Nemophila* does well in the shade of the Lily bed; *Sanvitalia procumbens*; *Convolvulus minor*; *Petunia*, Countess of Ellesmere; *Lupinus affinis* is extra good; dwarf *Antirrhinums*, or any other you like. I must say I have not found *Verbenas* satisfactory when so planted. The *Portulaca* is always ablaze and dashing in its own beauty, and *Pansies* are admirable. None of these detract from the beauty of the Lily, and they all seed themselves for the next year. You have only to thin them out, and be sure not to let them choke themselves; *Asperula*, *Mignonette* and *Petunias* are liable to this. Do not be in the least afraid to top dress the bed in the autumn with old manure; when well raked in, seeds enough come to the surface and remain till the season of spring growth.

Whoever may read these notes can select with confidence from the Lilies named, as they are all good, and endure our winters. I may hereafter write out a list of Lilies and their sub-varieties, in which their duplicate names, as

far as I can discover, shall be stated, and also the price demanded. This will be a help to all friends to select safely, and I consider every lady and gentleman who loves flowers a friend. Of course there are many other fine Lilies which have not been mentioned and are under cultivation to prove their fitness, which can be given hereafter, with their characteristics. To take up a Dutch catalogue at present, and give an order for twenty or thirty dollars worth of Lilies, no man, I repeat it, no man can safely tell what he is to get,—I am sure I could not. Some years ago I would have given a good deal to know what bought experience has taught me to-day; it would have saved me months of useless labor, and very much of disappointment and vexation of spirit.—J. H. GARNER, M. D., *Lucknow, Ontario.*

SOUTHERN VINES.

The *Tecoma radicans*, or Trumpet Flower, is quite common in all of the States bordering on the Gulf of Mexico. In some botanies it is named Bignonia, but the former name is the one given in the later botanies of the country. This is the "Trumpet Flower," and not the "Cow-itch" vine, as is also partly suggested by your correspondent, ALY OMAR, of Mississippi, in the July number of your MAGAZINE.

The "Cross Vine," mentioned by the same correspondent, is the *Bignonia capreolata*.

I do not believe that the *Tecoma* is poisonous, having often gathered specimens of it without injury, nor have I ever known of any person being poisoned by it. It is cultivated to some extent both at the North and South.

I have in cultivation the *Bignonia grandiflora*, which is a native of Japan. It is a very rapid grower, and in the summer time an almost constant bloomer. Ours is now in the third summer from planting, and nearly covers a Mulberry stump thirty-five feet high with several branches near the top, made from cut-off limbs. This vine when in flower is truly magnificent. Its place was previously occupied by a Virginia Creeper, whose vigorous growth almost covered the entire tree before its branches were shortened in, and from these branches the Creeper hung in festoons, covering the tree so completely as to kill many of its branches. Finally, a hired man, while I was absent from home, cut off the vine near its roots, and it died. He thought it was Poison Ivy.

The Virginia Creeper, *Ampelopsis quinquefolia*, is common in both Mississippi and Alabama. It has small greenish white flowers in clusters and black berries,—hence, it may be the "Cow-itch" of your Mississippi correspondent in July.

In the mountainous region Northwest of Austin there is another species of *Ampelopsis*, the *heptaphylla*, which has seven leaflets to its leaves instead of five. It grows to the height of twenty-five or thirty feet. It was first botanically described by the writer, several years ago.

In the Southern States, east of the Mississippi, and also in Eastern Texas, there is quite common a beautiful climber, having large, yellow, fragrant flowers. It is a smooth, woody vine, with opposite, evergreen leaves, and is called the Yellow Jessamine, *Gelsemium sempervirens*. It grows in moist woods and on the margins of swamps, and requires so much moisture that it is rarely successfully cultivated.

The beautiful Woodbine, or Honeysuckle, *Lonicera sempervirens*, is also quite common in the region of the Yellow Jessamine. Its flowers are scarlet or orange without, and yellow within. It remains in flower most of the time from Spring to Autumn.

These are probably the best of the Southern native climbers, but besides these there are several species of Evergreen Smilax, and also the "Supple Jack," *Berchemia volubilis*, all of which are very common, and to which we might add several others.—S. B. BUCKLEY, *Austin, Texas.*

AMPELOPSIS VEITCHII.

This interesting climbing plant, on the front and side of my residence, is again attracting a great deal of attention this year. The plants on the front or east side of the house were set out in the fall of 1869, receiving slight protection the first winter, and since then without any protection whatever they have proven perfectly hardy. Without any attempt at training or fastening, and without any particular care, they have grown very luxuriantly, creeping around the windows, over the entrance and up the sides of the house in a most picturesque manner, firmly fastening themselves to the wall and even to the painted wood work of the door and window casings, completely covering the wall with a dense mass of beautiful, bright, glossy green foliage in summer, turning to crimson scarlet of every shade and hue during the autumn, at which time it is most grandly beautiful. At first the small miniature foliage, setting close to the plants and to the wall, was singularly odd and attractive. But now that the plants have attained age and the character of the foliage is fully developed, it has full sized single leaves at the end of footstalks four to six inches long, thus throwing the leaves from the wall and making them susceptible to the summer breeze.

Many prominent horticulturists have visited Geneva to see these plants and have greatly admired them and been much pleased with their beauty. As these plants have proven so perfectly hardy, and attracted so much notice, the demand for them has been quite large, and the nurserymen are growing them in quantities to meet the wants of the people. While the character of the foliage is single leaflets, yet I have noticed on a plant on the south side of my house occasional branches with three leaflets at the end of many foot-stalks. Indeed, I have seen one plant, in another place, on which the three leaflets were very prominent, and some



LEAVES OF AMPELOPSIS VEITCHII.

anxiety was manifested lest it might be a plant of the Poison Ivy that had been propagated by mistake or through carelessness. An examination, however, proved it to be a genuine Veitchii. The difference between the occasional three leaflets of this plant and the foliage of the Poison Ivy is so marked and distinct as to be readily discernable at a glance by any one who is familiar with either variety.—GEO. S. CONOVER, *Geneva, N. Y.*

The *Ampelopsis Veitchii* is a very beautiful climbing plant something like our Virginia Creeper, of finer foli-

age and adhering more perfectly to a wall or building, though different plants of our native *Ampelopsis* differ very much in this respect. This plant was introduced from Japan about ten years since, and for some time was not disseminated very extensively because it proved tender in the nursery, and plants on walls suffered materially, often becoming killed back more than half the summer's growth. As the plants became older, however, they have proved more hardy, and now seem to suffer little by the severest winters. The finest plant in this section is owned by MR. GEORGE S. CONOVER, of Geneva, N. Y., who has kindly furnished us with the above description. It has attracted the attention of Horticulturists in all parts of the country, and scores have visited Geneva solely to see this fine plant.

In the July number, in answer to a correspondent, we published a description of the *Ampelopsis quinquefolia* or *Virginia Creeper*, and also of the poison Ivy, showing the difference in the foliage, the Poison Ivy having but three leaflets and the *Ampelopsis* five. This caused alarm on the part of some who had the *Ampelopsis Veitchii*, for this occasionally has three leaflets, in fact, the foliage is much diversified. The two leaves of which we give engravings were taken from the same branch.

PLANTS FOR PIAZZA GARDENING.

MR. VICK:—I have with much pleasure read the numbers of your MAGAZINE thus far published. I hope you will continue to let us have at least *one* MAGAZINE *entirely* devoted to the culture of the green things of earth. Spare no space to *wax* flowers, cooking receipes, lace curtains, etc. There are plenty of these spread over the land. Give us the flowers, Mr. VICK, the *real* flowers, and the fruit, and No. 1 vegetables, too; but do leave the *kitchen* out of your MAGAZINE. I have only a piazza garden—a house-top garden in so warm a climate as ours I do not think would answer. I find the *Achimene* an excellent plant for pot culture; it blooms profusely in shade, and does far better in tin cans than in pots. In October the small tubers can be packed in dry sand in a box and put away until the following April or May.

I make great use of tin cans; persons with little means use their wits if they love flowers. Some of these cans I painted on the outside, some I put common thick wrapping paper around, just pasting it on, and when several holes are put in the bottom they answer very well. In some I put a hole near the top and hang them on nails driven in the parts of the piazza, and plant drooping things, such as *Lobelia*, *Sweet Alyssum*, *Ferns*, etc., and they look very pretty. I cannot afford "swinging brackets," but I make a very good bracket with a piece of board.

I am trying some plants this season that I never tried before, and may give you the result. *Gladiolus* are utterly useless as piazza plants. I have for three seasons tried fine ones with no good result, neither in tubs nor pots did they bloom well. But *Lilies* bloomed well two years and died the third. Of vines, the *Maurandya*

and Nasturtium are fine. German Ivy for shade, formed into an arch over a large collection of Achimenes is very pretty. And the Kenilworth Ivy trained to run up small frames of wire, does better than if allowed to droop.

I have never been able to get Sweet Peas to bloom in boxes, the vines grow well but I never get a flower. Can you suggest a reason and a remedy?—WELL-WISHER, *Charleston Co., S. C.*

There is no danger that we will devote any space to recipes for cooking. If anything entirely provokes us in our reading it is—"one cupfull of sugar, two of flour, one of butter, three eggs," and so on, that we meet in almost all the papers—a most fearful compound, that does good only to the doctors and their successors.

NELUMBium LUTEUM.

JAMES VICK:—As I do not remember noticing the *Nelumbium luteum* in your illustrated list of aquatic plants, I concluded to write you of the fair show that would be visible from our West window were it not for the intervening field of Corn. A pond of eight or ten acres, one mass of petals, leaves and creamy white



NELTMBIUM LUTEUM.

flowers of the *Nelumbium luteum*—certainly the most magnificent display my eyes ever beheld. "I wish JAMES VICK could see this sight," I exclaimed to my husband who visited the pond with me, and who waded in and brought me an armful of the splendid flowers. This morning our humble home could boast of floral decorations a Prince might envy. The flowers are six to eight inches in diameter, lifted above the surface of the water on flower-stalks three feet long. The leaves are from two to two and one half feet in diameter. You may be entirely familiar with the *Nelumbium*, but this is the second time I have known of its blooming in this locality in sixteen years; indeed, it appears to be nearly extinct. Two years ago I took some pains to find a specimen for a friend, but although I visited all the localities where it had ever been known I did not find a single plant. The pond where they are now so abundant was then destitute of them, and according to the testimony of persons

in this vicinity it has not been seen until last year for many years. It is called Lake Bean, and sometimes Yaunkapin, or Waunkapin, by people of the neighborhood. I am trying to preserve a specimen for you.—ANN McCUNE, *Barkersville, Mo.*

THE CALOCHORTUS.

Very few have succeeded in growing the *Calochortus* with ordinary culture, either in America or Holland, as we remarked in a recent number, but E. HUZTELEN, of Le Roy, N. Y., seems to be more *lucky*, if we have a right to use this bad word, for he writes: "I have a fine bed of *Calochortus*, containing all the varieties shown in *Album von Eeden*, excepting No. 4. The soil in which they grow is a coarse quicksand enriched with a very little swamp muck. They are planted six inches deep. I never disturb them nor cover them in winter, and they come thicker every year, most of them growing two feet high and going to seed. They are less trouble than Tulips. Plenty of sand with a dry bottom, and full sunshine for three parts of the day seems to be all they need. I have also found that manure from the barnyard will do them harm instead of good. With the exception of pulling the weeds the treatment by which I succeed is to *let them alone*."—E. HUZTELEN.

A STRANGE CUCUMBER.

I have a strange fruit, or perhaps I should say vegetable. On the outside it is brown and netted and veined, something like a melon, but inside it is a regular Cucumber, both in appearance and flavor. I have had it two years, and it is early, productive and good. It would suit almost anyone, I think, for family use, but per-



haps its color would be an objection in the market, at least until its good qualities became known. I even like it for pickles, because its brown coating is a protection against poisoning. No one would try to make it look green by any poisonous compound. I think the seeds came with others sent me by a friend in Germany, but am not quite certain.—T. J. S.

Your Cucumber is doubtless the *Early Netted Russian*, a very good Cucumber introduced into this country from Russia several years ago.

SIX MONTHS IN CALIFORNIA.

In January, 1877, we took up our abode on quite an old ranche in the "foot-hills" of California. An acre or two was enclosed with the house, and, excepting a few Roses, fruit and shade trees, was entirely in its natural state. There were two or three of those wild groups of rocks peculiar to the region, (I would give much to possess one of these natural rockeries,) and I planted bulbs and vines among these, just for love, though I did not expect to see the flowers.

The grass was green when we took possession, and I noticed many tufts of pretty, finely-cut leaves, which soon developed clusters of little rose colored flowers. These proved to be a species of *Geranaceæ*, very neat and pretty, and interesting on account of its resemblances to its more beautiful and ambitious relatives. By the sides of out-buildings I noticed a plant



NEMOPHILA.

with thick fleshy leaves, at first cylindrical, then spatulate in form, then sending up a flower-stem crowned with a shield formed leaf, with a little leafy lid in the centre. Then the lid lifted, disclosing a cluster of tiny buds, and finally became a leafy bract at the base of the flowers. These flowers were small, and the plant not really beautiful, but very curious and interesting. It belonged to the *Portulacaceæ*, and the structure of the flowers corresponded with *Talinum*. Near relations of this plant, the *Calandrinias* soon appeared, in two or three varieties. One, of a very rich crimson color, flowered as freely and was almost as showy as *Portulaca*. Then came the *Nemophilas*, three or four kinds; a little *Oenothera*, pale straw color, and opening in the morning instead of evening; a Violet with finely-cut leaves, and flowers of a peculiarly rich yellow, the two upper petals a velvety brown on the under side. Then there were Larkspurs, much like some species in the Eastern States, and two neat

little Saxifrages, growing, true to their name, (rock breaker,) on rocky knolls. And the Poppies! (*Eschscholtzias*.) I had known them for years, but the flowers when exiles are not like these in their native land—as large as



CELESTIAL STAR TULIP.

Tulips, of the richest orange and the most glittering satiny texture, and in prodigal profusion.

All these, and some others, bloomed by the middle of April within the limits of our yard. On the hills the beautiful Painted Cup, (*Castilleja coccinea*,) bloomed all through March and April. The Shooting Star, (*Dodecatheon Meadia*,) bloomed abundantly and long, the purple flowers contrasting prettily with the yellow Tulips, (*Calochortus luteum*,) which were as plenty as Dandelions in New England. Other bulbous-rooted flowers were abundant and beau-



ITHURIEL'S SPEAR—PLANT AND FLOWER.

tiful. Another *Calochortus*, the Mariposa or Butterfly Tulip*; also the Celestial Star Tulip, (*C. cærulea*); Ithuriel's Spear (*Tritelia*,) white, yellow and blue; and several species of

* Illustrated in August number, page 244.

Brodiaea, the prettiest of which, the Climbing Hyacinth,* was waving its rose-colored clusters from every bush by the way on May day.

There were beautiful shrubs also. When we first entered the State, in December, the Manzanita was blooming, and in May had not wholly disappeared. It is an Ericaceæ, having light-green leaves of the peculiar leathery texture that characterizes many of that order, and



WHITE TEA OR MOUNTAIN BIRCH.

its large clusters of rose-tinted flowers are as delicate and fragrant as the Arbutus. A beautiful Azalea grew by some streams, and large patches on the hill-sides were gay with the flowers of the Ceanothus.

But in May the natural beauty of the region was on the wane. The grass was dry and bleached, the Chaparral was dropping its leaves, and where there was no water for irrigation everything soon yielded up its life. But Oh! the gardens where Roses and Oleanders tossed their wealth of bloom in the air,—where Geraniums grew in hedges, and Fuchsias like trees! California is the Wonderland, the El Dorado, the bright land of flowers. A glamour surrounds it in our imaginations, like the soft haze that veils her hills all through the summer time, shortening distance, concealing their ruggedness, softening their harsh outlines. It is a land to visit, to admire, to remember for a life-time. But give me for a *home* the land where soft rains fall, and nurture the sweet wild flowers all the summer through; where Nature does not lavish all her wealth

* Illustrated in the May number, page 153.

upon the spring time, but decks herself with varied robes, and charms the eye in mid-summer and in autumn; where, when her sweet children die, she leaves not their graves for the pitiless sun to glare upon, but folds them away with tender care, and tucks a soft white mantle about their resting-place.—F. E. B., *La Centre, Wash. Ter.*

Our correspondent does not exaggerate the glories of the spring time in California. A visit to that land of flowers is a wonder-feast never to be forgotten, but to be thought of and talked of always. Those who have cultivated the *Eschscholtzia* may imagine something of the effect of immense masses, hills and valleys covered with this golden flower; but when for the first time we saw a large mass of *Nemophila* we were ready to say we had never even conceived of anything so beautiful.

FINE PANSIES.

FRIEND VICK:—(For you are a friend to all flower lovers,) I have heard so many people say you could tell nothing by the Catalogues about the size of flowers, for all florists would exaggerate and show flowers larger than they ever grew, and especially was this the case in regard to Pansies. This morning while I was out looking at my Pansies, the thought came into my mind to select some from the plants and make as good a representation of them as I could on paper (for I know nothing whatever about drawing,) and send it to Mr. VICK, so he might know there was one willing to say he had told only the truth. These flowers were all picked from last year's plants excepting No. 1, which came from seed sown last April. From two papers of seed I got one hundred nice plants. Some twenty or more are in blossom and nearly all the others are budded. The soil where they were grown was originally a very heavy clay. I mixed sand and woods dirt with it, and twice each week give the plants a watering of liquid manure, always taking care not to put on too much.

I want to say to you there is one woman who is satisfied with her success and very much in love with the flowers, and she sincerely hopes there are others who will meet with as good success. One great trouble with too many is they think when they have sown the seeds they have done all that is necessary on their part, and, of course, in a few weeks ought to be able to gather flowers. But such is not the case, as I know by experience; it is a constant warfare from first to last with weeds and insects of all kinds. I have a nice show of annuals, but will forbear saying more for fear I have already taken up too much of your valuable space.—Mrs. P. P. N., *Cassopolis, Mich.*

The drawings, which were exceedingly well made, exhibited eight well-formed flowers, all of which were two inches in diameter.

CULTURE OF FERNS.

MR. VICK :—With this letter I send you a box with No. 1 on it, containing a bunch of scarlet Geranium blossoms; I think it is Lord Derby. Please tell me whether it is anything uncommon for a Geranium to send out another stem from the main bunch of bloom, like the one I send you. I send a slip of a Japonica; I would like to know whether it is hardy. I have it in a pot, and it is nearly three feet high. I have had it more than a year and it has never bloomed. It was about eighteen inches high when it was sent to me. I also send a slip with bloom, of what I suppose to be a Jasmine; please tell me if it is, and whether it is hardy. I will be very thankful for any information concerning either.

And would it be asking too much of you to tell the readers of your valuable MAGAZINE (I think it is the best Floral paper I have ever met with, and I have taken several,) how easy it is to grow the wild Ferns. I think no plant is easier grown, and yet several of my floral correspondents write me for the particulars, and others will say "don't send me any more Ferns, for I can't get them to grow." I have a bed along the North side of our house, about sixty feet long and two feet wide, filled with dirt from the wood pile and some from the woods, although I have other beds of Ferns that do equally as well that have only wood pile dirt. The long bed is filled with Ferns and a border of Pansies. Every one who sees it admires it, and well they may, for it has such a cool, refreshing look. I try to encourage everybody that I can to grow Ferns, for I love them so dearly myself that I want all to have some if it is only one bunch. I get my Ferns whenever I happen to have a chance, no matter what time of year it is. I know Ferns like a damp, shady place, but mine do nicely with only the shade of the house and what water nature supplies, unless during a long dry spell I give them the waste water on washing days. I have had some of my Ferns for more than five years, and they are just as nice as ever. I have a rockery, too, but I managed to cover it so thickly with Ferns that the rocks would be concealed, for we do not have pretty rocks and stones here, and I don't believe in doing without Ferns just because we haven't the pretty stones. That was the reason I tried planting in beds; always make the best of what we have, you know. One day when I went visiting, I took with me some bunches of Ferns and planted them in such a nice place for Ferns, formed by the corner of the house and verandah; while I was planting them, the old farmer came out and looked at them, and said he bet he could find

plenty just such things in his woods, and when I told him I got them in the woods, and that they were nothing but wild Ferns he was astonished that I should go to the woods for plants when I had so many nice flowers in my yard; he admitted that the Ferns were nice, but did not know they could be transplanted. Before I left he said he would have a wagon load hauled up for his daughter if she wished. So, please tell the readers of the MAGAZINE to get the Ferns whenever they can, and plant them without a fear that they will not grow.

And now, Mr. VICK, please listen till I tell you what my twenty-seven months old baby, GRACE, said of the Pansies, and I will be through. She loves them better than any other flower. One day, she stood admiring a large bunch of Pansies for some time, when she turned to me and said, "Mama, these Pansies are looking at me."—MRS. V. P., *London, O.*

The Geranium and Rose, and other plants, produce a branch from a flower or cluster of flowers occasionally. This was explained in the July number, pages 219 and 220. The Camellia Japonica is not hardy. It needs a cool, moist atmosphere. The Jasmine is also tender

FUNNY GARDENING IN OREGON.

MR. VICK :—Having visited a flower garden the other day which seems to have set aside all established rules in regard to soil and culture, I concluded to appeal to you and see if you could solve the mystery. The garden in question is on the bank of a river, at the foot of a hill; the soil is a hard, yellow clay, and had been tramped down into a smooth door-yard for a year before the flowers were planted. Then, without spading the soil, cuttings of Fuchsias, Roses, Geraniums, Honeysuckles, and small roots of Callas, Pinks, Stocks, and many others, were stuck in holes in the hard, unbroken ground. I remember how my sister and I laughed at this primitive mode of making a flower garden, and at the idea of any one expecting flowers to grow under such circumstances. We told the owner (who was a novice in gardening,) that the flowers wouldn't grow—that she should have spaded the ground, etc. She only laughed and said it was too late to remedy it that season, but would do better next year. But lo and behold! that flower garden is now a mass of beauty! The Fuchsias are beautiful, blossom-laden little trees; the Roses, Pinks and Geraniums are literally with "rank luxuriance crowned;" the Stocks—in immense clumps—are perennial and constantly in bloom; while the tall, stately Callas can not be surpassed. And this without any care or culture. What the garden will be in two or three years more can only be imagined, for it is only two years since the flowers were planted.

What can be the cause? Now, with the richest soil, the unceasing care, the watering and fertilizing that our garden has, it is equalled, and in many flowers surpassed, by this neglected, uncultivated garden with its hard clay soil. How is it to be explained? We think it must be the climate. It is about a mile from the ocean, (we are two miles higher up the river,) and nearly every night a heavy fog or mist comes up, while during the day it is warm and sunny. But this can not entirely explain it; the soil and culture are altogether out of rule. Can you explain it?—L. D. O., *Chetco, Curry Co., Oregon.*

We don't know anything about the cause of such wonderful success under such unfavorable circumstances, but we do know something about those glorious mists that roll up from the Pacific every evening and water the earth and make it wonderfully productive, while without such aid all would be a barren wilderness.

NOTES AND QUERIES.

Will Virginia Creeper, (*Ampelopsis quinquefolia*), kill a tree if allowed to run up the trunk? There is a Locust tree before my window that has been pruned until there is a bare trunk of some fifteen or twenty feet, and I thought "what a nice place for a Creeper, and how lovely that bare pole would look draped with living green." So this spring I planted several roots of American Ivy and tied the vines around the trunk of the tree, and I am becoming quite alarmed at my success. The first leaves withered and dropped, but new ones started all the length of the vine, which was several feet, and it is creeping up the tree very fast. I do not wish the tree to die, for I love it. I think the Locust, when let alone enough, is one of our loveliest native trees. There is an airy grace about its delicate foliage that charms one,—the lightest zephyr sets its fairy fingers to beckoning, and it is easy to believe a dryad still lives in its leafy bower, invisible to mortal eyes.

The *Ampelopsis quinquefolia* grows wild here. I got my vines in a neighboring field, and every one of them is growing,—and how interesting is their growth! The tiny tendrils crawl up walls and trees like some sensate creature. This is rather a long query; but spare it for the sake of the lovely Locust trees all over the land that are being pruned out of all nature and beauty, with an eye to fence rails in some cases, I suspect.

There is another question I wish to ask. Are May-bugs injurious to plants? You know what I mean, do you not? Those fat beetles that you dig up in the spring, and that fly into the house in June and beat their stupid heads against the lamp chimneys. Some call them

June-bugs. I turned up so many in the flower-beds this spring in a torpid state, and I did not know what to do with them. They seem harmless creatures enough, and I dislike to destroy life unnecessarily. I have no scruples when wire-worms and cut-worms are in question, for I know "their tricks and their ways" are evil continually.

Now for a note.—Some of my Sweet Peas did not thrive this spring; the leaves were yellowish, and the were several inches behind some others sowed at the same time. There was some old wall plaster in the cellar and I gave them a light top-dressing of it; in a short time they grew very green, and are now full of blossoms. I never saw a better batch of these butterfly beauties,—scarlet, black and white. But they are not really scarlet, nor yet black, but cherry and purple, or else I must be color-blind. The scarlet *Lychnis* is really scarlet, and the black Pansy is black,—and by-the-way, it is the only black flower I am acquainted with.

My Canterbury Bells are in bloom for the second time this summer. I removed the first flowers when faded and, as no seed was formed, the strength of the plant is expended on a second crop of blossoms. This old-fashioned flower is well worthy of cultivation, and I have often wondered at its neglect by amateurs. I seldom see it anywhere but in my own garden, where it is much admired; many people ask the name of it, and I tell them it is such an old-fashioned flower that it is really new to most people. My Canterbury Bells took a strange freak this year; out of fourteen plants in one border only three bloomed. The others are growing vigorously, and I expect great things of them next year. I tried to coax them out, but all my blandishments were in vain; not a blow was forthcoming. But I am not much astonished at their caprice—*belles* often do have whims; and this particular bell did the same thing once before; but it is queer conduct for a biennial, when you come to think of it.

Is not this a good year for Mignonette, I wonder, or has mine run out? It is very poor. It has sown itself for three or four years, and it may be possible fresh seed is needed. What do you think. And my Verbenas, too, have sown themselves for a number of years, and are not doing very well.—E. A. M., *Green Tree, Pa.*

If the tree was small and weak the *Ampelopsis* would cover and smother it, but if the tree was a strong Elm, such as we have in our neighborhood with its trunk covered with *Ampelopsis*, it would do no perceptible injury. The larvæ of June-bugs are very destructive to the roots of small plants; kill all you find. For Mignonette and Verbenas you had better try a new lot of seed. The poorest plants produce the most, and the most vigorous seeds, so plants from fallen seed grow worse and worse.



THE ISLAND OF CYPRUS.

Since the English came in possession of the Island of Cyprus, by the recent Treaty of Berlin, a great desire to learn something of the character of the island has been very naturally developed. The following account of its climate, character, &c., from the London *Gardeners' Chronicle*, will be interesting to our readers:

"Cyprus lies between $34^{\circ} 33' 30''$ and $35^{\circ} 41' 18''$ north latitude, and $32^{\circ} 15' 42''$ and $34^{\circ} 35' 48''$ east longitude from Greenwich, and with the exception of Sicily, Sardinia and Crete, it is the largest island in the Mediterranean Sea. The Southwestern portion (nearly half of the area) is mountainous, the highest peak, Troodos (ancient Cyprian Olympus,) rising to an altitude of 6000 feet. The North coast is also skirted by a narrow range of hills, which reaches 3000 feet in height. Between these two mountain ranges is an extensive plain drained mainly by two rivers—a large one flowing eastward, and a small one flowing westward. In the lowlands near the coast are several inexhaustible salt lakes.

"The Southwestern mountains consist mainly of greenstone and trachyte, with tertiary chalk and marl. Here and there are beds of gypsum and isolated spots of Jura limestone and 'Vienna' sandstone. The North chain is built up almost entirely of limestone, overlaid on both flanks with sandstone, and the intervening plain of post-tertiary deposits of a very complex character. Marl, sand, sandrock and conglomerate are the principal elements. These deposits extend from the sea-coast up to 200 feet, or even 600 feet, and are spread over all the lower parts of the island, forming a not very fertile soil.

"Any one thinking of going to Cyprus would regard the climatal conditions as of the first importance, hence a little more detail on this point may be desirable. There is no doubt that the summer is excessively hot, so hot as to have a paralysing effect on the pursuits of men; on the other hand the winter is relatively cold, and often it becomes necessary to have recourse

to artificial heat. *Thymra spicata* and *Poterium spinosum*, the two commonest shrubs in the island, are frequently used to warm dwelling rooms. The change from one extreme to the other is very sudden, no spring or autumn intervening. In the midst of summer the temperature often exceeds 100° Fahr. in the shade; and though it rarely falls so low as the freezing point in winter, the cold makes itself felt very much, because the means of protection against it are so inadequate. But the mean winter temperature is not sufficient to arrest vegetation. Indeed, there is what may be termed the winter flora, which is already over at the beginning of March. Winter (October, November and December) is the rainy season, whilst the summer is rainless with an uninterruptedly cloudless sky. Sometimes in winter rain falls during thirty to forty days in succession, and vegetation is reanimated and reinvigorated. The parching heat and continuous drought of summer, however, use up the accumulations of winter; brooks and rivers present dry channels, and vegetation ceases. During the rainy season the Pedias, the principal river in the island, often overflows its banks, and the contiguous land owes its fertility to these periodic inundations. Nearly all traffic in the lower part of the island is interrupted during this period. Occasionally the overflow assumes the dimensions of a flood, causing considerable damage. It is also recorded that no rain fell on the island during thirty-six years, in the reign of Constantine, consequently most of the inhabitants were obliged to leave the country. During the whole time (March to November) Unger and Kotschy were in Cyprus there was scarcely any rain. The harvest is over in May, after which there is nothing but the depressing stubble fields to be seen, look in what direction we may. Even Flax, the latest of the crops, is already turning yellow. Cotton is the only summer crop, and that can be grown anywhere artificial watering is possible. In June and July the formation of dew ceases, and the atmosphere becomes charged with a dense vapor, which veils objects

even at short distances. Added to this, the slightest wind cause clouds of penetrating dust to rise, and insects abound whose torment it is impossible to escape. The *malaria* prevails at the sea-ports, and all who can, avoid them as much as possible during the months of July and August. It is described as a dense white fog, which spreads over the plain, and even covers the mountains with its unwholesome vapor. Day after day the fierce heat continues, and all business is done in the evening or during the night. Sunstroke is frequent amongst those who venture out during the day."

FOUNTAINS.

Thousands of people in this country are introducing fountains into their gardens. Wherever water can be obtained everybody seems to have, or contemplate having, a fountain. A fountain should be water, and not cast iron, yet most of those we see are expensive cast iron constructions, with a few drops of water. A correspondent of the *London Garden* thus truthfully speaks what we have often felt: "Perhaps no feature in connection with the laying out of pleasure grounds and flower gardens requires nicer management than these. Everything depends upon the judgment of the operator and the choice of a situation whether the result will be a success or a failure. The passion for fountains and cascades in flower gardens has in many instances led to their being found in situations where they are nothing but an incongruity. A jet of water has in itself a refreshing and pleasing effect almost any where on a warm summer day; but the 'fountains' which so frequently form the central figures of our geometrical flower gardens have usually a rather depressing effect. Built of solid masonry, and standing in the midst of a dreary waste of gravel walks, or at best in the center of a group of geometrical-shaped flower beds—and in ninety-nine cases in a hundred unable to play for want of water—they are almost meaningless objects, wholly out of place. Naiads, mermaids, dolphins, and other mythical figures and fishes, bleaching in the sun among a lot of scarlet Geraniums and Calceolarias, &c., is surely as absurd an incongruity as could possibly be conceived. The first essential in a fountain or a cascade is water, and this is just what is usually wanting. We are acquainted with numbers of flower gardens containing fountains where there is hardly sufficient water to play them for one week in the year, and there the nude figures stand, blistering in the sun and blackened with soot, a melancholy testimony of the incompetency and stupidity of the designer. And quite as often, when the fountain is play-

ing, its noblest effort is a disappointing squirt, which might be easily surpassed by a garden engine or a common brass syringe."

BEGONIAS AS BASKET PLANTS.—The improved kinds of tuberous-rooted Begonias, now everywhere so abundant, make excellent basket plants. In this way their large, brilliantly colored blossoms, which are naturally of a drooping character, can be seen to advantage, and if grown in good soil and kept well supplied with water in a moderately cool, dry house, they will produce a charming display for months in succession. On rockwork, too, in any corner of a conservatory or green house, or even out of doors in a warm corner, they grow and flower freely, and are exceedingly effective. To tall, light-leaved, sub-tropical plants, in a warm, sheltered situation, they would add variety of color and be much more satisfactory than plants of other kinds often used for such purposes.—*The Garden*.

TRAPS FOR WINGED INSECTS.—It is the custom in Europe to entrap winged insects by placing about the trees vessels filled with sweetened water, or something of the kind. "M. CARRIERE, of the Jardin des Plantes, Paris, reports on Baits for Insects, that 'beer and water' caught 850 flies and other winged creatures; 'pure beer' 631; 'crushed pears,' 'weak wine,' and 'pure wine' came next in the order given, and pure honey at the bottom of the list, with only seventeen victims. This would seem to disprove the literal truth of the old saying (correct as it is in its moral) that 'we may catch more flies with a spoonful of honey than with a gallon of vinegar.' No doubt, however, the 'loud' odor of the beer, which was in a highly fermented state, had a great deal to do with attracting the insects."

ENGLISH FARMERS.—The celebrated English farmer, J. J. MECHI, says:—109,000 quarters of foreign wheat recently came to the port of London in one week. As we have in the United Kingdom 23,903,314 acres of permanent pasture, and 6,459,404 acres of Clovers, Saintfoin and Grasses under cultivation, and as they are especially favored this moist season, we need not be surprised at the fall in the price of butter, milk and cheese. Only 1s. per acre difference on this immense area represents a sum of 1,518,130 pounds sterling, either in quantity or value. There must certainly be a considerable increase in the production of meat. Grass farmers have little to pay for horse or manual labor, seed or machinery.



THE AMARANTHUS.

MR. VICK:—I send in the same mail with this specimens of a new variety of *Amaranthus*. I saw the plants in the place of a friend. They are gorgeous in color, and attain a height of at least three feet. I cannot obtain seeds of any of the florists here, as they have never had the plants.—L. A. H., *Boston, Mass.*

We judge from the appearance of the leaves sent us that they came from at least three distinct kinds of *Amaranthus*, as follows: The long, narrow leaves were evidently *Amaranthus salicifolius*, quite distinct and true. The leaves of this variety are long, narrow and somewhat waving on the edges.



AMARANTHUS BICOLOR.

Tricolor, a very showy leaf, crimson, yellow and green. *Bi-color*, red and green, or red and yellow, sometimes red and brown. These colored leaves are very apt to sport, and it is not uncommon to find a diversity of color on the same plant.

We have had for several years a most elegant new *Amaranthus*, far more beautiful than any known variety, we think. A year since we exhibited it at State Fairs, and it attracted unusual attention and applause. We had a Colored Plate made from it last Autumn, but did not like to publish it, for fear it might not come true another season. It is now, however, promising well, and if what we hope, our readers will see its representation this autumn.

The *Amaranthus* embraces a large class of plants, and some of them so diversified in character that, to the casual observer, they hardly seem to belong to the same family. They are mainly, however, valuable for their ornamental foliage, the leaves of most varieties being highly colored, while in some the form as well as color is desirable. The present popularity of ornamental leaved plants for bedding out renders this class more than usually interesting. The great difference of habit makes it

necessary to give engravings of the varieties, to show the more marked distinctions. The drooping flower shows *A. caudatus*, sometimes called Love Lies Bleeding, a rather coarse plant,



AMARANTHUS CAUDATUS.

yet graceful and excellent for autumn decoration, with racemes of flowers sometimes two to three feet in length. Another variety, Prince's Feather, has flowers nearly similar, but arranged in erect spikes. The smallest engraving



AMARANTHUS SALICIFOLIUS.

represents *bi-color*, *tricolor* and several other sorts of about the same habit, though differing in color. The large engraving gives a very good representation of *salicifolius*, or the Foun-

tain Plant, a free growing plant that sometimes reaches a height of five feet or more, and is a very pretty object in a suitable position. The *Amaranthus* are half-hardy plants, and useful in many situations, as the back-ground of a flower bed, a bed on the lawn, or as an ornamental hedge. In a rich soil, where plants make a vigorous growth, the varieties with bright colors sometimes become dull. It is unfortunate that we cannot always rely on the color, no matter how fine the plants from which the seeds are derived, but success is most assured in a warm, dry season, and in a light or rather poor soil. The *Amaranthus* is a native of the East Indies, but has been in cultivation in Europe since the days of Queen ELIZABETH, and in America since its first settlement. The name is a favorite with poets, and means never-withering. The leaves of the species of *Amaranthus* are wholesome food, and many varieties are eaten in their native countries, like Spinach.

Bergamot.—I have seen nothing in the MAGAZINE in regard to the treatment of the Bergamota. I have one and there are three others in Reading, and if it is convenient I wish you would write in regard to their habits and the treatment they need.—Miss. E. V., Reading, Mass.

Bergamot is a wild English plant found in wet places, of the Mint genus, and its proper name is *Mentha odorata*. It grows about one foot in height, and bears purple flowers which blossom in July and August. The oil of Bergamot sold by druggists is not produced by this plant, we believe, but from the rind of a peculiar orange called the Bergamot orange, *Citrus Bergamium*. What plant our correspondent has, unless the old Bergamot, we cannot say.

Treatment of the Hydrangea.—In your next MONTHLY MAGAZINE please inform me and other readers of your pamphlet how to treat a Hydrangea, not the hardy variety, after it has finished blooming. Also name some plant that is as showy and as easy to treat.—A SUBSCRIBER, Holyoke, Mass.

Keep growing till frost and then remove to the cellar for the winter; give only water enough to keep the wood from shriveling. The Oleander is very showy, and requires the same treatment as Hydrangea. Clematis Jackmanii is more showy than either.

THE CACALIA NATURALIZED.—Dr. GREEN, of Homer, N. Y., informs us that the *Cacalia* has become naturalized in that section, somewhat to the injury of pastures; in fact, has become a "gorgeous nuisance."

WILD CUCUMBER.—We forgot to mention, in answer to a correspondent, that the *Wild Cucumber* is *Echinocystis lobata*, and not *Cucumis dipsaceus*, classed among the Gourds.

PILOGYNE SUAVIS.

A little vine which I planted last spring, the *Pilogyne suavis*, has already attained the height of nineteen feet, with numerous branches twisting and turning in every direction fancy may dictate. Many questions are asked me in regard to the habits and the care necessary to protect this charming vine from the cold winter peculiar to our locality. An article in some number of your MAGAZINE in regard to the care of this cheerful, laughing, happy friend to humanity would be very welcome.—E. W. S., Portlandville, N. Y.

This rapid growing Climber was brought to this country by Mr. FREDERICK SCHLEIGEL, formerly green-house foreman for Messrs. ELLWANGER & BARRY, of this city. The plants are propagated from cuttings, as it does not seed. Small plants set out in the spring, with good rich culture, will often attain the height of twenty feet, covering a space four or five



PILOGYNE SUAVIS.

feet wide. For verandahs it is very desirable, being light and graceful, yet making an excellent screen. The first frost, however, kills it back to the ground, the roots should then be taken up and potted, cutting off the old vine a few inches from the ground. Placed in a light window it will soon start, and in a short time fill the whole window with its beautiful glossy leaves. The flowers are very small, creamy white, and quite fragrant. The whole plant has an odor of musk, and hence has often been called the Musk Vine. In the spring cut the vine back to the root and plant out, and it will grow stronger from year to year. The following is from a correspondent:—

A FINE CLIMBER FOR THE PARLOR IN WINTER.

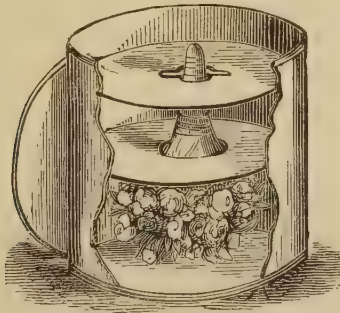
Only a few Climbers are adapted to room culture. Ivy is too large leaved, and nearly all others are annuals and not lasting. But there is one plant that comes up to all the requirements, — *Pilogyne suavis* — (*Pilogyne* s.,

Zechneria, Bryonia scabra.) It belongs to the family of the Gourds, and has several good qualities; it is a very rapid grower, branching off in all directions, is slightly musk-scented, grows and flowers continually, summer and winter, and has plenty of foliage. The plant grows as well in a half shaded as in a sunny place, is never surly or sensitive, and grows so extraordinarily strong that last fall, as I took up my plants for winter use in the house, I thought to try the good qualities of my *Pilogyne* as a window plant. I placed it in a small vase, putting in the center a long plant-stick, on the top of which was fastened the frame of an old umbrella. I wound the plant on the stick, and divided the different branches over the frame-work. The result after two months was a solid covering of foliage, intermixed with numberless flowers. The flowers are small, the male bell-shaped and female almost as round as a ball. I never could get it fruit-bearing. The fruit, a berry completely filled with seed, is egg-shaped, dry, tough and small. The plant needs water very freely.—F. B., *Freehold, N. J.*

PACKING FLOWERS.

MR. VICK :—I would like to know the best method for packing flowers to take to an Exhibition, say a distance of from fifty to a hundred miles. Please say something about it in the next number of your MAGAZINE.—T. O. V., *Hamilton, Canada.*

For shipping a few cut flowers a paper or card-board box, such as can generally be found at the dry goods stores, is very convenient. Cut the flowers in the morning, when they are fresh, and not in the evening of a dry day, for then they will be in a measure wilted, and will not keep well; nor on a wet day, for then many kinds will have a dragged appearance, from which they will not recover. Line the bottom and sides of the box with leaves,—ferns



are excellent. Make a layer of buds and such flowers as will bear a little pressure, at the bottom, and on these another layer of the more delicate flowers. Those that are very delicate may be surrounded with cotton wadding or batting before being placed in the box. If you desire to make another layer, before doing so cover the last with three or four thicknesses of tissue paper. Cover with wadding, enough to fill the box, and fasten on the cover. Use no water.

Another method we have practiced in carrying flowers to Fairs, is to line a common market-basket with strong, damp manilla paper. Over this put a lining of dry paper, pack the

flowers in layers as before described, and cover the top of the basket with several sheets of strong manilla paper well fastened to the basket with twine. In this way we have carried our flowers in good condition from Rochester to Vermont, to St. Paul, Minnesota and to Omaha, Nebraska. For tall spikes of flowers, like *Gladiolus*, we use round bushel baskets with damp moss at the bottom, in which the stems are placed.

For carrying bouquets, get a round box like the engraving, if possible, at any rate one so large that the flowers will touch neither the top nor sides. Have two moveable divisions, with holes in their centers, as shown in the engraving, through which the handle of the bouquet must be placed and secured. When these divisions are properly fastened to the sides of the box, nothing short of the destruction of the box by a railroad disaster, or something of the kind, will injure the flowers.

Soil for Succulents.—If not too much trouble, I would like you to inform me, through your MAGAZINE, of the nature of succulents; what soil and care they require; if all are alike, &c. I have hunted Catalogues and such books as I have, but do not find the desired information. It would probably benefit others as well as myself. You have no idea how one feels over such small affairs when one is isolated away on the confines of civilization.—Mrs. H. C. G., *Fire-Steel, D. Ter.*

The succulent plants are all, or nearly all, natives of warm countries, and flourish best in light, dry soils. They are particularly adapted to rockeries. This class of plants is becoming very popular, and are used in what is known as sub-tropical gardening, that is, gardens furnished with plants of a tropical, or sub-tropical, origin, such as Century Plant, Agaves, Cannas, Caladiums, Ricinus, Yucca, Wigandea, Tritoma, Pampas Grass, &c.

WEEDS IN LAWNS.—Weeds are continually appearing on our lawns and causing trouble. Many disappear after a time, as the constant cutting prevents seeding and eventually causes their destruction. A few, like the narrow-leaved Plantain, it may be necessary to dig out. This is conveniently done with a narrow instrument, something like a chisel. A pinch of salt placed on a tenacious weed causes its death. A correspondent of the *Country Gentleman* proposes another method—"have a spoonful of vitriol in a small open-mouthed bottle, fastened on the end of a two foot handle, we have only to dip the bruised end of a small rod into it and touch the heart of a weed, or of three or four successively before dipping again, and they are done for. We have only to see if there are any more left."

FRINGED PETUNIAS.

MR. VICK:—I enclose you a box of Petunias, different from any I ever before grew. They are curled-edged, or fringed, and I think the largest and finest flowers of the kind I ever saw. Are they common, or a novelty?—MRS. M. M. J.

The flowers received are fine specimens of the Fringed Petunia. The variety, though not old, can hardly be considered a novelty. Sev-



eral years ago, in our Petunia house, where we grow the large-flowered kinds for seed, as they do not seed in the open air, we discovered one plant bearing fringed flowers. The plant was immediately removed from the neighborhood of other sorts so as to prevent fertilization by their pollen. The seed saved from that plant next season proved true, and we have since grown the Fringed Petunia, and sent it all over the world. Recently we have grown some double varieties nicely fringed, and the same has been done in Germany. The little engraving shows a group taken from our beds.

RIBBON BEDS OF TULIPS.

The most brilliant ribbon beds I ever saw were made of Tulips. True, they do not last a great while, but I never saw anything so glorious as the Tulip beds of England and Holland. For two years I have tried to do something like it in this country, but have failed in a great degree. The trouble is I cannot get them to flower together. While one kind is in full bloom another is just opening, and another will be going out of bloom. And yet I have tried, with the advice of florists, and after consulting Catalogues, to obtain those that would flower at the same time, but failed. Is it possible to remedy this, or must I give up my pet idea of making a gorgeous ribbon bed of Tulips? I shall be thankful for any advice, and I presume others will also.—BERKLEY.

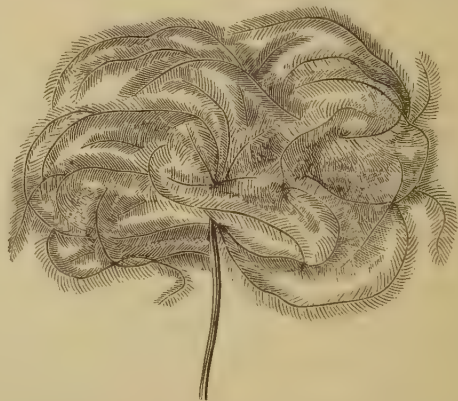
It is, perhaps, difficult to obtain Tulips that will flower at the same time, but not impossible, and not even as difficult as supposed by our correspondent. There are certain varieties that under the same circumstances are known to flower at the same time. But these bulbs are ordered and planted, and they do not flower together, as was expected, and the result is dis-

appointment instead of pleasure. Let us look at the causes of this trouble. If fifty of the same variety are planted in the autumn, twenty-five of which were grown in America, and twenty-five in Holland, those grown in America will flower several days before the others. If any portion of the bed is higher than the other so as to secure better drainage, or more exposed to the sun, either of these causes will make a day or two of difference in the time of flowering. It will be seen, therefore, that the person to whom the selection of bulbs for such a purpose is left must understand the matter, and also that the planter must arrange the bed so as to have it uniform in temperature.

Last year a gentleman of Madison, Indiana, Mr. A. C. LANIER, wrote us a letter something like that published above, and wished to know if it was possible to make a ribbon bed of double Tulips that would all flower simultaneously. The bed was to be circular. We took particular pains to show there was no very great difficulty in the matter, and forwarded *Rex Rubrorum*, a bright scarlet for the outside rows; *Morillo*, a light rose for the second rows; *Purple Crown*, a purplish crimson for the third color; and *Salvator Rosa*, a bright rose or pink for the center. As we supposed, all flowered together, and made a gorgeous display.

CLEMATIS.

MR. VICK:—I send you this, to me, rather singular bloom of a vine, together with the leaf. The leaf and stem were almost as dry when gathered by me, four days ago, as now. The vine grows around old stumps in the dry fields, not in the "flat woods," and it is pretty in winter bouquets. I never saw anything like it described in your books. I am from Kentucky, and since I came here have had no home, and could not cultivate flowers,



but enjoy the beautiful ones I see growing all around me. I often see flowers which I have never seen before.—C. F., Newmansville, Florida.

Instead of a flower, we received with the above a tuft of seeds with their feathery tails, as shown in the engraving. The variety we cannot state with certainty, but think it *Clematis Virginiana*.

GOOSEBERRIES.

Can you tell me the reason why I cannot grow Gooseberries as well here as I did in the old country. I have the same sorts, because I brought some root cuttings with me, and therefore there could have been no deception or mistake. I have tried several kinds of soil, and don't succeed. I have been told that my experience is nothing unusual. It certainly is not pleasant to think I can't grow a decent Gooseberry, after growing them all my life with success.—GOOSEBERRY FANCIER.

There is no country, as we have often observed, where everything can be grown and grown well. Almost anywhere, by the use of extraordinary means, almost anything may be grown

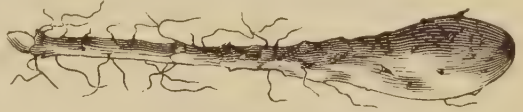


indifferently. Here, our hot, dry summers are unfavorable to the Gooseberry, while it gives us luscious Peaches. In England, the cool, moist summers produce the Gooseberry to perfection, while the Peach can only be grown on walls with a warm exposure, and the pruning and thinning necessary to produce a crop is almost a fine art. Now, why should we begrudge the inhabitants of England the Gooseberry? Let us enjoy what we have, and not make ourselves miserable over what is just beyond our reach. We have, however, some native Gooseberries that are pretty fair both in size and quality, but bearing no kind of comparison to the large, thin-skinned, fine English sorts. We have experimented a good deal with the foreign sorts, and our experience is, that with a cool soil well mulched all summer, they do a little good for a year or so, then a mildew covers the fruit and destroys it; and it is not always exempt even for one year. We give an engraving of an English Gooseberry.

FINE CLIMBERS.

Please excuse me for trying to call your attention to a few native climbers that are so useful I think your readers would like them. The first is the Wild Grape. To cover a large arbor or fence it is perfection. I think it gives a cooler shade than most climbers, on account of its thick foliage. The other is here called the Wild Cucumber. Is it what you call Cucumis in the Gourd family? It grows twelve feet sometimes; the leaves are shaped like those of the Cucumber; the vines are covered with blossoms of a whitish color, and the sweetest fragrance imaginable. The fruit is shaped some like

your Cucumis, and the seeds resemble the large dark Watermelon seeds. They must be planted in the fall. Of all your flowers our little ones like the blotched and striped Petunias best, and before breakfast they must look for the blossoms; they are always new. My *Floral Cabinet* gave a description of the Cinnamon Vine, from Japan. The description of which is, "Root grows from one to four pounds; perfectly hardy.



CHINESE YAM TUBER.

Tubers may remain in the ground in latitude of Western New York. Vine very ornamental as well as deliciously fragrant; in the florescent state filling the air with a cinnamon odor. Will frequently run fifteen to twenty feet; is propagated from the tubers or little bulbs that grow upon the vines." I think your readers would like them.—MRS. M. A. N., *Twin Groves, Wis.*

The *Cinnamon Vine* is the old Chinese Yam with a new name. It was introduced from China some twenty years since, and was to drive the Potato from the country, and make the wheat growers tremble for their great staple. While it has not done anything in the way of



CHINESE YAM, OR CINNAMON VINE.

furnishing food, it has proved a very pretty hardy climber, its white blossoms having a very pleasant cinnamon fragrance. Our engravings show the form of the tuber, and also a branch in flower. The roots can be put out either in the spring or autumn. Good roots sell at about fifty cents each.

PENTSTEMON.

Will you please tell me the name of the pretty purplish, bell-shaped flower I enclose in a box with this. It is a perennial, grows two feet in height, with long, slender branches, mostly or entirely branching from the ground. The flowers are tubular, and I consider it very pretty. The plant is perfectly hardy. It was given to me by a friend who thought it very choice, but I never learned the name, nor do I see it anywhere. I think it should have a name, and I know it would be liked if known.—Mrs. S. M. J., Mich.

Your flower is a Penstemon, but what variety we cannot state from the unfortunate condition in which the flower reached us. There are a great many varieties, differing both in form and color, but nearly all are beautiful hardy Peren-



nials, well worthy of a place in any garden. We are now cultivating some new and very promising varieties. The Penstemons, we believe, are all natives of America, and are popular as garden plants everywhere. We give an engraving of one of the old good sorts, but nothing less than a colored plate could show the difference between this and several other sorts, the main difference being in the color.

GOOD MANAGEMENT.—Mrs. Jos. B., of Columbus, Ohio, writes us as follows about her good luck—good management, we guess. “I had very good luck with my seeds last year, did not lose a single packet, and I had a hot-bed, four by six feet, as full as it could be, and lost none in transplanting. Took seven First Premiums at State Fair, on Pansies, Phlox, Verbenas, Balsams, Cockscombs, Hanging Baskets, and your Premium.”

OUR FLORAL PRIZES.

The first report on our Floral Premiums we have just received from the President of the State Horticultural and Pomological Association, of Texas.

MR. JAMES VICK:—*Dear Sir:*—Enclosed please find certified copy of the report, and awards made by the special committee appointed to pass upon the cut flowers entered at our Exhibition in competition for VICK'S Floral Premiums. There were three gentlemen florists and botanists appointed, two only of whom acted, and I regret that their report is not much more in detail, showing the number and names of the flowers exhibited, by the successful competitors, at least, with the reasons stated for their awards. It would have been more satisfactory, and I doubt not would have astonished you at the variety and quantity of these floral displays, coming from the far off frontier. The young lady to whom was awarded the first prize exhibited no less than fifty (50) named varieties, many of them the products of the latest bulbous and other importations which can be had from Eastern florists, while many others were nearly equal, both in variety and excellence. I would not forget to mention that one of the successful competitors brought her flowers over one hundred miles. I announced to the audience when the report was read, that as soon as the report was forwarded to you the premiums would be returned to our Treasurer, ROBERT BREWSTER, who will deliver the same. Hoping all has passed to your satisfaction, I am, Respectfully,

A. B. SMALL, Pres't.

ANSWERS.

C. G., Elora, Ont. The vine you have is not Poison Ivy. It is *Clematis Virginiana*.

DAVID MORRIS, East Palestine, Ohio. The tree is *Negundo aceroides*, Ash-leaved Maple.

J. H. RIBLETT, Kahoko, Mo. The plant of which you send us a leaf is a *Caladium*.

MRS. WM. E. CALIGAN, Coldwater, Mich. The plant you found in March last and transplanted, and which “soon grew up a transparent stalk about a foot in height, with light lavender blossoms,” is *Hydrophyllum appendiculatum*; natural order, *Hydrophyllaceae*.

B., Toronto. The “wild Clover” with a yellow flower, which you have in your lawn, is doubtless *Medicago*. It is getting in our lawns here. When too thick we dig it up.

MRS. JENNIE P., Louisiana, Mo.—The *Johnny Jumpups* are Pansies run wild. The Blue Bells are *Mertensia Virginica*—Lungwort. The little white flower is *Anemone thalictroides*—Rue Anemone. The bulbous root, like Hyacinth, is Feathered Hyacinth. The flower from Washington is *Lychnis Hageana*.

LATE TREATMENT OF ASPARAGUS BEDS.—The common plan is to allow the tops to grow until the seed has ripened in the autumn, then cut off the tops and place them upon the bed as a winter protection. It would be just as well to cut the tops before the seed has fully ripened.

OXALIS.

Keep your promises, Mr. VICK. We have not had that promised article in the MONTHLY on the Oxalis.—MRS. MOTTE, *Oakley, S. C.*

We are glad not only to be reminded of our promises, but to learn the wishes of our friends. We had forgotten this promise, and as September is the best time for planting, hasten to redeem our word. This very interesting family of plants embraces an almost endless variety, there being one hundred and fifty known; some strictly winter blooming, others flowering only in summer, and still others that are in bloom



OXALIS VERSICOLOR.

almost the entire year. *Oxalis stricta* is common North, growing wild on cultivated land; leaf trifoliate, like a Clover leaf; flower small, yellow. *O. Acetocella*, common in mossy woods, flowers white, two to four inches high. This is the true Shamrock of Ireland. There are several varieties of Oxalis that will flower only in summer, and no coaxing will induce them to bloom well in the house, at least, not until the spring time. Of them we shall speak at another time, and will now describe those which flower finely in the house, and which it is desirable to plant either in September or early in October, in fact, as early as bulbs can be obtained.

WINTER BLOOMING VARIETIES.

O. versicolor. This has small, black bulbs, which throw up a very slender stem, and narrow leaflets. Flowers white, with bright pink margins to the petals. This variety planted in September will bloom in December, but must have sunshine. The flowers refuse to expand in cloudy weather. It is very popular South, where they have plenty of sun in the winter. After blooming, remove the bulbs, pot and all, to some cool place, taking care to keep them from the mice.

O. lutea, leaves trifoliate, about the size of White Clover. Flowers bright yellow, an inch

in diameter, and produced very freely, and are quite fragrant. This is a strong grower, and is very easy of cultivation. It blooms in March. After ripening its foliage they should be kept



OXALIS LUTEA.

the same as *O. versicolor*. There is a double variety of this species, but it is not as desirable as the single.

O. Bowii. This variety has large, thick, fleshy leaves, and large, bright rose colored



OXALIS FLORIBUNDA IN POT.

flowers. These should be potted as early in September as possible. It blooms in October and November, and has the largest flowers of any of the cultivated kinds. All of the above species must be planted in a light sandy soil.

They form new bulbs each season, and these should be carefully kept, as they are much more satisfactory than imported bulbs.

PERPETUAL BLOOMING VARIETIES.

The *floribunda* varieties are very abundant bloomers, in fact, flowering constantly, and are excellent for hanging pots or baskets. Their character is shown in the engraving. *Origiesi*, on account of its erect growth, is best adapted for pots. It is a wonderful bloomer.

Oxalis floribunda alba and *rosea*. This variety has tuberous roots, and may be had in bloom almost the entire year. The foliage is very strong, and the clusters of bloom are borne on long footstalks, starting directly from the tuber. A single tuber the size of a Hickory nut will often have a hundred open flowers at a



OXALIS CERNUA PLENA.

time. As their names indicate there are two colors, white and pink. The flowers are from one-half to three-quarters of an inch in diameter. This variety can be planted and is obtainable at any season of the year. It is propagated from offsets and from seed. For a basket or hanging pot it is deservedly popular.

O. Origiesi. A new and somewhat rare species from Brazil. It often grows eighteen inches high and in good shape. The upper side of the leaf is rich olive green, and the under side bright violet purple. Flowers quite small, yellow, and are borne in clusters. The beauty of the plant, however, is not in the flowers, but its handsome foliage.

THE MOUNTAIN LAUREL.

For the first time in all our life, last June, we passed over some of the mountains of Pennsylvania, and saw, in all their glory, the Wood Laurel, *Kalmia latifolia*, and nowhere did we ever behold anything more beautiful. About the same time Mr. MEEHAN, of the *Gardener's Monthly*, passed over the same mountains on his way to Rochester, and he, too, was delighted with the Kalmias, and so we give his description, which must answer until we have time to write something better. "How strange is the waking up in the morning among those cloud-capped hills! Down where I live, near the level of the sea, the Spring violets had scarcely gone; but here the Golden Rod, the special favorites of Autumn, were already in blossom. Summer was, however, still lingering, as we could see by the gorgeous masses of 'Wood Laurel,' *Kalmia latifolia*, which, by-the-way, are only 'Wood' Laurels. At places lower down, the little seeds, fine as dust, would never make a successful sprout in the open ground of a sunny plain, so they have to take to the woods to get even a taste of the pleasures of life; but here in the mountain mists they take to the naked exposed rocks and open places, and those who have seen them only in the shelter of some friendly wood can have no idea of their magnificence as seen up here."

The Best Strawberry.—I have a good many Strawberries, but want the largest and best. Is the *Sharpless* what it is recommended to be?—TELL.

The *Sharpless* is the biggest and best Strawberry we know anything about. At least, that is our opinion, founded, of course, on a short acquaintance. We have not added a new Strawberry to the bed we have for our own use in a good while, but we shall plant the *Sharpless* at once.

COLORING PLATES.—At the commencement of our MAGAZINE, in January last, we thought to give two plates in some numbers and none in others, only being mindful to furnish twelve in the year. The idea was to illustrate as many plants as possible about planting time. In accordance with this plan, in the last number we gave no plate, having furnished two in April; but we cannot say that we were pleased with the appearance of our MAGAZINE without a colored plate. Hereafter we design to give a colored plate with every number. For October we are preparing in a new style a plate showing nine of our best Hardy Bulbs.

GARLIC FOR MOLES.—A lady of Carrollton, Illinois, where Lilies and other bulbs were sorely injured by moles, now protects them entirely by planting garlic about the beds.



OUR YOUNG PEOPLE.

A MAGIC BOX.

On my table I have a magic box. It does not look like anything very wonderful,—just a tiny bit of a brown box, packed full of some curious white stuff; but you'll see there is something strange about it when I tell you that, closely folded and packed within its shining brown covers, it holds a greater marvel than ever juggler's box unfolded—no less than a perfect beauty of a plant, with tender green leaves and rich clusters of fragrant flowers—a



SPROUTING CORN.

thing of inexpressible beauty that will be a joy to me all the long summer. Yet if you open this treasure-box you will see nothing remarkably wonderful, only a little powder-like stuff, without a hint of its possible glory. How, then, will I manage to draw the shy beauty out of its little brown covers, and unfold it to our sight? I'll tell you. By and by, when the sun gets brighter, and mother earth has got her old bones thoroughly warm, I shall carefully prepare a soft little bed for my curious box. Very tenderly I shall lay it down, and cover it with a fine, soft covering, and then I shall come away and leave it. The first drop of dew or rain that reaches the box will be greedily drank up, or absorbed into it, the shell will grow softer, a wonderful little live thing, called a germ, will seem to wake up out of sleep, stretch itself a little, push open the box and step out. When fairly out, part of it will start down into the earth for water and food, and another part will push aside the cover I laid over it, and show its pretty green head in the sun, as seen in the sprouting Corn.



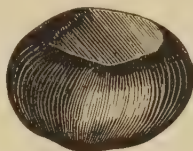
PANSY PLANT AND FLOWERS.

So, my magic box is nothing but a seed!

Well, yes, that is what we call it; but it is no less a miracle, and a marvel, because it is so common we think nothing of it.

Let me tell you more about it. Do you know how it came to be a seed, instead of a few atoms of starch and other material? Why, all last summer, a lovely plant stood in my garden, and worked with all its power, collecting treasures from the air and earth, just to prepare and pack up a few of these little brown boxes.

All summer long its roots spread around in the soft ground, and the tiny mouths at the end of them drew up every bit of food they could find, and sent it up into the plant, and its hundreds of leaves drew in more food from the air. As



HORSE CHESTNUT.

soon as the mother plant was strong enough it sent up a stem with a little ball on the top, packed full of boxes, carefully covered from cold and damp by delicate tinted robes as soft and smooth as satin, and protected by a soft green cloak of silk, which is soon put off. This beautiful dress, which was the very loveliest the plant could make, was a sign of its noble use, to guard and protect the treasure boxes and keep safely the marvels prepared for another summer.

All this time, you may be sure, I had noticed it; and when it grew larger, and the green cloak began to open here and there, and I could see the delicate satin robes inside, I watched it closer than ever. And at last, when the green mantle was thrown entirely off, and the beautiful bright flower, with its precious package of boxes, opened to the morning sun, I—why, I picked it, and carried it into the house, where it gave out its delicious breath and filled the room with fragrance. It was a Pansy flower.

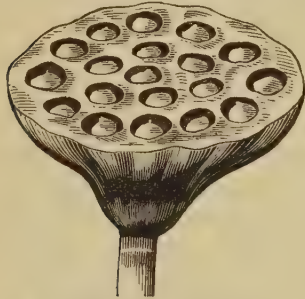


PEAS IN OPEN POD.

Now, of course, taking it away from the plant put an end to the packing of that bundle of little boxes; and if the plant had been like some people, it would have taken its first disappointment to heart, become discouraged, drooped its

beautiful leaves, and said, (in flower talk,) "It's of no use for me to try to ripen my seeds. No sooner do I get a package open to the light than some great monster tears it off."

But the dear little green mother didn't belong to that easily discouraged class. By no means. No sooner had she lost her pretty blossom than she began again. From every joint below the top she sent out a new stem of



SEED-POD OF NELUMBium.

buds, and where I might have had but one flower if I had left it on the branch, I now had a whole bush full. But I could not let them alone. —

Every one that opened its pretty eyes in the daylight was at once carried into the house, to live on my table and perfume the room. Bravely the little plant went on with her work. Bud after bud came up, so determined was she to perfect at least one box of treasures for next year; and at last it was accomplished. One modest little blossom did hide under the leaves so that I did not see it until it was fading, went on and ripened its green ball of seeds. They grew large and brown. The flower petals, being no longer needed to protect them, fell off, and there I found them one day just ready to fall to the ground.



GOOSEBERRY.

I have other magic boxes, too. One is round and brown, not so large as a pin's head, and has a beautiful plant packed safely away in it; and another is black and angled, and holds



PEACHES.

another kind of flower. This is flat and yellow, and has a sort of wing to it; and that is thin and long, and will give me still a different pleasure. Isn't it wonderful that, little and simple as these tiny boxes look, each one has mysteriously wrapped up in it the power to produce a plant just like its parent?

Some of the boxes are hard and tough as a cocoanut, and some are soft and live in a house lined with silk. Some are folded in cloaks and some are wrapped in leaves. Some are packed in a row, in long, narrow houses, like Peas and Beans; and some rattle about loosely in a round one. Some of them have each a room to itself, like the Nelumbium, or Water Lily; and some

are protected by an army of spears, as the children have often seen in the wild Gooseberry. Some are kept warm in blankets of wool, and some are smothered in the middle of walls of flesh. There is no end to the variety of ways in which these wonder boxes are arranged.

And that is not the end of marvels. The little seed has not only to be formed, and packed ready for next year, it also needs to travel a



MAPLE SEED.

little to find a place to grow. If it did not there would not be room for all the seeds on one plant to grow, and besides, each kind would grow only in one spot, and there would be no variety of trees or plants.

The ways of getting about of the seeds are as wonderful and beautiful as anything about them. Some of them have wings and fly off on the breeze. The Maple seed has a pair of them, much like insect's wings, as you can see for yourself; and the Dandelion has one of the softest feathers, somewhat like the Thistle in the cut, that carries it far up into the air. Some of the seed cups burst with a violence and scatter the little boxes far and wide. One kind that I have read of is said to make a tremendous explosion, that can be heard for miles.



THISTLE SEED.

Some seeds have hooks by which they catch on to people and animals, and so travel about with them.

You know of one—you call it "Stick-tight." Others are sticky outside, and in that way make animals carry them about. And even

some seeds are wrapped up in fruits, and eaten by birds and small animals: the fruit digests, but the seeds fall to the ground and grow. Birds plant seeds in another way, by hiding them in the ground, and squirrels do a great deal of the same sort of work.



SEED-POD OF PANSY.

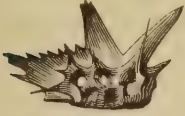
That much abused bird, the Crow, has been seen to plant Acorns, and Oaks have grown from them. And Pigeons are notorious for taking Nutmegs from one of the Malay Islands, where they grow, and planting them all over the whole group, much to the disgust of the owner of the Nutmeg Island.



SEED OF FEATHER GRASS.

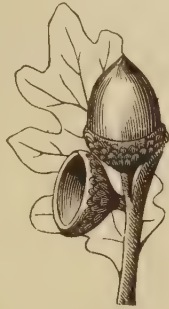
The delicious envelope of the seed, such as the Cherry, is, you see, only a bait to induce birds to carry the seed away and give it a new place to grow.

Perhaps the most wonderful of the wonder boxes belong to the Ferns and Mosses, and can only be seen with a microscope.



HEDGEHOG SEED.

The Fern, you know, has no real flowers, but if you look at it carefully, at certain times of the year, you will see on the under side a tiny row of dots around the edge of every delicate leaf. These are boxes of seeds, or what perform the use of seeds, and are very curious to study. Every tiny dot is a heap of round boxes. When ripe the box opens wide, like two sides of a cockle-shell, and scatters the golden colored atoms with which it is filled all about. What makes it burst open? A marvelous arrangement—no less than a little spring, which at first is coiled around the box, but as it grows, straightens itself till it pulls apart the box, as I have said.



ACORN.

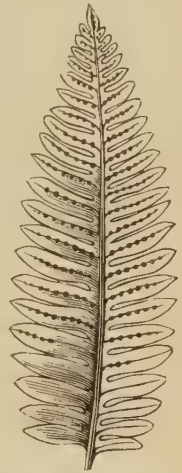
Seeds of Mosses—tiny things, so small they look like dust, or are invisible to us—are among the loveliest things in the world. They are packed in the daintiest imaginable baskets and boxes. A basket of seeds, under the microscope, looks like a nest full of eggs, and when they are ripe the rain washes them out. The boxes are tightly closed till all is ready, when some which have a spring inside burst open with a snap, scattering the seeds; others open a small door in the side and let the contents drop out; while still another kind jerks up the lid and shoots the seeds out in a fine cloud.



CHERRIES.

These atoms of seeds are so small that they float about in the air. We do not see them. There are millions upon millions, of many kinds, about us; and they have a very useful work to do in the world, which you may be sure they never try to shirk. This duty is to start vegetable growth in every possible spot, a sort of pioneer work, and no one can imagine how much of the beauty of the earth we owe to the tiny seeds which plant the first bit of green on barren places.

This is how they do it: Wherever a spot of moisture remains, on bare rock or stone fence, on an old stump or cottage roof, there some of these ever-floating seeds will stick and begin to grow. If the sun does not burn them up they will flourish, the next rain will leave more of its drops with them, particles of sand and dust will lodge there and gradually make a little soil. Some of the larger winged seed will touch and take root, die and leave a little heap of soil, making room for larger ones, and after a while the bare place will be covered with beauty. Bare rocks that rise out of the sea thus come to be green spots, where birds plant the seed of fruit, and the restless waves of the ocean bring heavy nuts, and at last, where men and animals may live. And all this is due to the tiny Mosses; for without their silent, patient labor, no larger plant could have found root there for a moment.



FERN FROND.

Did you ever hear of such magical boxes as these?

We had concluded to tell the Youth something about the curious forms of seeds, and the wonderful life and beauty which they conceal, though often almost too small to be seen with the naked eye. We were preparing some engravings to illustrate this subject when finding in our basket of nice things an article forwarded us by a gentleman who wrote that he was an old publisher, the sketch was so good that we preferred to use the illustrations with this article than to prepare one of our own. Only to-day, when looking in the bright sunshine, for this flower delights in sun and brightness, at a plant of Double Portulaca, having six beautiful flowers as double as Roses, and two inches in diameter, while the plant made a circle four feet around, we thought that on the first of May last we planted the seed that contained all that then existed of this plant, and it was a little speck like a shining silver grain of sand. Wonders are occurring all around us, if we would only look and see. In some future number we will say something about the curious forms of seeds, a sample of which we give in the Hedgehog seed. The Feather Grass is a very curious thing. The seed is something of the form of an oat, not quite so large, and very sharp pointed. The feather is often nearly a foot in length. With a little breeze, this

feather is carried up and away, of course, taking the seed with it. When the air is at rest it gradually descends, point down, and thus buries itself in the ground. The swaying by the wind breaks off the feather near the seed, and it is left in the ground to grow, while the feather, having done its work, decays. Once one of these seeds fell on my hand with such force as to make it bleed.

COTTAGE IN THE WOODS.

MR. VICK:—We are so glad, Aunt Mary and I, because you have a Children's Department to your MAGAZINE. We live all alone by ourselves in a little cottage in the woods, and have a garden that we work in every day; and we spend much time out of doors in the

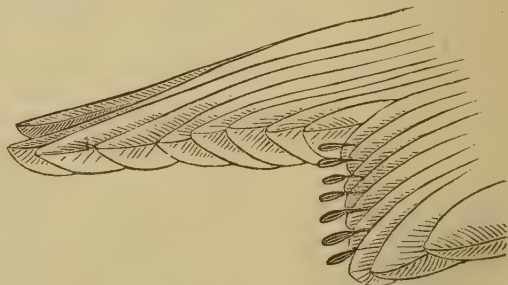


CEDAR BIRD.

pleasant weather, rambling through the woods and fields. But I began to write to-day to ask you the names of some little birds that came into our garden this morning; they are of a pretty soft gray color on the upper part of the body, and white or very light gray underneath. But the first thing I noticed was their top-knots; I only know one other bird in this place that has a top-knot, and that is the Blue Jay. These birds are not as plump as Blue Jays, but are larger and plumper than Sparrows. They have large black eyes and a very narrow edging of yellow on their tails; and they bathe, for a pair of them was sitting on a wild plum tree, drying their feathers, when I saw them. They do not seem so shy as most birds, for they sat still and let me look at them a good while; I was quite near and saw them spread out their tails like fans, and that was the way I saw the yellow on the ends, for it would not be noticed at a distance. I thought I would write and ask you about them, as you have kindly given the little folks permission to come to you with all their troubles.

I suppose you have Audubon's book of birds. Is it not splendid! But oh, dear! it costs so much money; just think, two hundred dollars! I saw it—or them, rather, for there are ten volumes,—at a gentleman's house some time ago, and when I went home I asked Aunt Mary if she would not buy them for me. "My dear child," she said, "what do you suppose they would cost?" "I don't know, Aunt," I replied, "I never thought of that; are they very dear?" Then Aunt said she happened to know that C's copy cost two hundred dollars. So, of course, we never could afford to buy them, for we have very little money; but Aunt Mary says we are very rich, because we have what money cannot buy—good health and contented minds. But my mind is not so very well contented when I think of those lovely books full of painted birds, and if we had them what a comfort it would be, when we saw a strange bird, to hunt for it in the book. Do you know of any book that tells about the birds that come into our gardens and orchards, and that does not cost much money? I know a good many birds, but sometimes one comes along like this little gray-coat, that I do not know, and then I cannot rest until I find out its name. I have no playmates, so I think more about the birds and flowers than most other little girls, I suppose.—MARJORIE.

The birds you saw were Cedar birds, *Ampelis Cedrorum*. They are sometimes called Cherry birds, on account of their great liking for that fruit, no doubt; they are also known as Wax Wings, because of the small scarlet appendages to the wing feathers of adult birds, which look like little pieces of wax, as shown in the engraving. They are very sociable and loving in their disposition. The nest, which is usually built in an apple or cherry tree about the last week in June or a little later, is rather large, and made up of coarse



WING OF THE CEDAR BIRD.

grasses lined with finer ones. The eggs, three or four in number, are a light faded bluish color, with black spots scattered over the surface.

Good, reliable books on any scientific subject are costly, for several reasons: 1st. Their sale is limited, few people caring to buy purely scientific works. 2d. Very few men have knowledge and experience sufficient to write a book that shall be a safe guide in the study of Nature, and of Nature's laws; and the illustrating of such books requires that the draughtsman shall not only be an artist, but also well posted in the science himself, in order to appreciate and faithfully render the subjects

the author designs to illustrate. Dr. E. CONE's "Key to American Birds" is the standard work of reference, and is cheap at the price, \$7.00, because it is thoroughly accurate and reliable. MINOT's "Birds of New England" is very convenient, and costs only \$3.00.

PRETTY GRASSES.

I send you what I think a very nice vase of Grasses, because I wish you to tell your readers that by a little care they can make very nice ornaments from both our native and cultivated Grasses. I use both, and always look out in the proper season to save the best of the wild Grasses when in perfection.—EMMA, *Alton, N. Y.*



We thought it best to give our readers a look at this pretty vase rather than attempt to describe the many things it contained. The suggestions of our correspondent are timely.

A VERY EARLY AND LARGE PEACH.—A very early, large, handsome and good Peach is something to be desired, and yet it could hardly be expected that so many good qualities could be combined in one variety. A good many years ago, when we were *only a boy*, no Peach pleased us so much as the *Early Ann*. When walking in the garden, before even thinking of ripe Peaches, along in July, we would often notice some white, unripe looking Peaches under the trees, and carelessly picking up one or two, thinking they had been stung by insects, or fallen unripe from other causes, it was an agreeable surprise to find them ripe and juicy. Of course, we started right off to tell the folks that the Peaches were ripe, so that all could have a share, instead of keeping it a secret for a day or two for our own benefit. We have not heard anything of this variety of late, but on the 20th of July last had a chance to see and taste a larger, finer looking, and, no doubt, a better and earlier variety, a seedling raised near Waterloo, N. Y. Messrs. ELLWANGER & BARRY have distributed specimens of this Peach that ripened on the original tree, and have named it from the place of its origin, the *Waterloo*. We have not learned whether it has been propagated yet.

MY MELONS.

I suppose everybody likes Melons, but everybody don't know how to grow them, though perhaps almost every one thinks it no great thing to do, and it is not, and yet very few farmer's boys know how to grow them good and early. We always had them, that is, a few, but they ripened pretty late, and were not very good and sweet, I think, because they got ripe when the nights were pretty cold. I think a Melon, to be good, must ripen in warm weather—not only when the sun is hot in the middle of the day, but when the nights are warm. Then, I think, a poor Melon is a pretty poor thing, and when I hear of people getting sick eating them, I think they must have had poor Melons.

Now, I got my father to let me have about a quarter of an acre of land for a Melon patch, in a warm, sunny place, sloping to the southeast, and you may believe it is hot on warm days. Then I dug good large holes where the hills should be and filled them with old manure, and covered this with earth six inches deep, about, I guess. Then I planted the seed, about half Musk Melon and half Water Melon. After the seeds were planted I made a good many little boxes, without either top or bottom, just the size to fit a pane of glass, and put this on the boxes. As I could not get enough glass for all the boxes, I cut up some mosquito netting and covered the others. I didn't make boxes for all, because I hadn't time.

My Melons are all doing pretty well, but those without boxes were blown about by the winds and grew slow, and the bugs troubled them very bad. Those with the glass did the best, but the boxes with the netting did very well, and helped a good deal. I have the finest crop of Melons I ever saw. I guess I shall have to sell some, and I don't think they will make anybody sick. The Musk Melons are getting ripe, and the Water Melons are growing like fun.

FARMER'S BOY.

A SUCCESSFUL YOUNG GARDENER.—A delighted Young Gardener, of Worcester, Mass., wrote of his success, as follows, on the 7th of August:—"We had one package of Pansies which we planted in a box and then transplanted them. They have been in blossom for some time,—no two alike. Our Everlastings, Petunias and other flowers are blooming magnificently. Our Sweet Peas have been most beautiful, the admiration of all who saw them. They are of all colors, from the lightest to the darkest. Now I must tell you about my vegetables. I got two packages of Peas, and picked three bushels from them. Our Lettuce, Beets, Corn, &c., were the best we ever had."

THE GREAT STATE FLOWER SHOWS.

So far as we can learn the Exhibitions of Flowers at the great Fairs this year will be unusually large and fine. We have received from correspondents especial notices of grand preparations for the *Southern Ohio Fair*, to be held at Dayton, from the 23d to the 29th of September; the *Kansas City Industrial and Agricultural Association*, exhibition at Kansas City, from September 16th to the 21st; of the *Northern Ohio Fair Association*, at Cleveland, from September 9th to the 13th; and of the *Iowa State Fair*, at Cedar Rapids, from September 16th to the 20th. There is but one way to make Fairs good, and that is for the good people to attend and control them, and they seem to design to do this the present season. Let the Officers try to please and accommodate the people, and the people try to make the duties of the Officers as light and pleasant as possible.

AUTUMN CATALOGUE OF BULBS.—*Vick's Illustrated Catalogue and Floral Guide* is now published twice a year, the 1st of December, and the 15th of August. The August number contains descriptions of the best *Hyacinths*, *Tulips*, *Lilies*, *Pæonies*, and all hardy bulbs and plants suitable for planting in the garden in the fall. Also descriptions of all plants suitable for winter culture in the house, with the best modes of treatment, and instructions for watering, ventilation, etc. Scores of illustrations. All for the postage, a two cent stamp. Those who wish a good show of bulbs in their gardens in the spring, or good flowers in their houses in the winter, must prepare for them in the autumn.

CLUBS.—Additions of one or more can be made to clubs at any time, at club rates. Those who have paid \$1.25 can form a club of four more, and have the benefit of club rates for all, by sending \$3.75 more. Club subscribers are not confined to one post-office. We will send the *MAGAZINE* anywhere in the world.

LOST NUMBERS.—If any number fails to arrive, please notify us by Postal Card. Occasional losses in the mails seem unavoidable. We will supply all lost numbers promptly, without any charge.

BACK NUMBERS.—We can furnish full sets of the *MAGAZINE* for the year. New subscribers, therefore, can commence with the January number.

EXTRA COPIES.—We will supply our subscribers with extra copies of any number for ten cents each.

VICK'S FLORAL PREMIUMS.

FOR AMATEURS ONLY.

To encourage the culture of Flowers we authorized the officers of every State and Territorial Agricultural Society in the United States (and where there are two prominent Societies in one State, both,) and the Provinces of Canada, to offer, in my behalf, the following premiums:

For Best Collection of Cut Flowers, . .	\$20 00
Second Best " " " "	10 00
Third Best " " " "	5 00
Fourth Best " " " "	Floral Chromo.

Also,

For the Best Ornamental Floral Work,
(either Bouquet or Floral Ornament,) . . . \$5 00

Up to the time of going to press the Officers of the following Societies have notified us of the acceptance of our proposition, and published the offer in their Premium Lists:

Maryland Agricultural and Mechanical Association, at Pimlico, near Baltimore, September 24th and continue four days.

Wisconsin State Agricultural Society, at Madison, September 9-13.

North-Western Agricultural and Mechanical Association, at Dubuque, Iowa, September 9-13.

Virginia State Agricultural Society, at Richmond, October 29 and four following days.

Minnesota Agricultural and Mechanical Association, at Minneapolis, September 2-7.

Kansas City Industrial and Agricultural Fair Association, Kansas City, Mo., September 16-21.

Nevada State Agricultural, Mining and Mechanical Society, at Reno.

Michigan State Agricultural Society, at Detroit, September 16th to 20th.

Kentucky Agricultural and Mechanical Association, at Lexington, August 27, for five days.

Northern Wisconsin Agricultural and Mechanical Association, at Oshkosh, September 23-27.

Oregon State Fair, at Fair Grounds near Salem, October 10th to 18th.

Ohio State Fair, at Columbus, September 9-13.

Northern Ohio Fair Association, at Cleveland, September 9-13.

Southern Ohio Fair Association, at Dayton, September 23d to 27th.

Montana Agricultural, Mineral and Mechanical Association, at Helena, September 23, for six days.

Minnesota State Agricultural Society, at St. Paul, September 2-7.

Western Montana Agricultural, Mechanical and Mineral Association, at Missoula, October 9th for four days.

Southeast Arkansas Agricultural and Mechanical Fair Association, at Monticello, October 23 for four days.

Iowa State Agricultural Society, at Cedar Rapids, September 16-20.

PARLOR ORGANS.—In our advertising pages of this year our readers must have noticed the advertisements of two of the best Organ makers in the country, PRINCE & Co., of Buffalo, and GEORGE WOODS & Co., of Cambridgeport, Mass. A Prince Organ we have had for a quarter of a century, and have equally good reasons to know the merits of the Wood instruments. We, therefore, say a good word for them, and entirely unsolicited.



DOUBLE HYACINTH.



SINGLE HYACINTH.



DUC VAN THOL TULIPS



SINGLE AND DOUBLE TULIPS.



LATE SHOW TULIPS



PARROT TULIPS



CROCUS.



COLCHICUM.



SNOW-DROPS

Lithographic & Chromo Co. of Rochester, N.Y.